

THAI TEACHERS' BELIEFS ABOUT LEARNER-CENTERED EDUCATION:
IMPLICATIONS FOR *SUCCESS FOR LIFE THAILAND*

Vasinee Israsena, B.Ed. M.A.

Dissertation Prepared for the Degree of
DOCTOR OF EDUCATION

UNIVERSITY OF NORTH TEXAS

August 2007

APPROVED:

George S. Morrison, Major Professor
Michael F. Sayler, Minor Professor
Tommie Lawhon, Committee Member
Lloyd R. Kinnison, Committee Member
Jan M. Holden, Chair of the Department of
Counseling, Development, and Higher
Education
M. Jean Keller, Dean of the College of Education
Sandra L. Terrell, Dean of the Robert B. Toulouse
School of Graduate Studies

Israsena, Vasinee. Thai Teachers' Beliefs about Learner Centered Education: Implications for Success For Life Thailand. Doctor of Education (Early Childhood Education), August 2007, 112 pp., 12 tables, reference list, 89 titles.

The Thai government has strongly advocated for the learner-centered education for the past decade. *Success For Life Thailand* (SFLT), a brain-research-based early childhood education program blended with the theories of the developmentally appropriate practices and child-centered philosophies, has been implemented in Thailand for over 8 years. The purposes of the present study were to: (a) describe the current statuses of the Thai early childhood educators' learner-centered beliefs and practices, (b) identify if the SFLT training workshop affects teachers' learner-centered beliefs and practices, and (c) examine if other variables, along with familiarity with the SFLT program, predict teachers' learner-centered beliefs and practices.

Ninety-three preschool and kindergarten teachers participated in the study. Among them, 17 were SFLT trainees in 1999 and 2000 (i.e., the previously trained group), 43 were trained in Year 2006 (the currently trained group), and the others were comparable to the currently trained group by matching the key personal and school variables. The Teachers Beliefs and Practices Survey: 3-5 Year Olds (Burts et al., 2000) and the Learner-Centered Education: the Assessment of Learner-Centered (ALCP) for K-3 (McCombs, 2001) were used to collect data on the various domains of the learner-centered beliefs and practices.

Findings reveal that: (a) Thai teachers highly endorse learner-centered beliefs, (b) Thai educators demonstrate relatively low levels of developmentally appropriate practices and high levels of developmentally inappropriate practices (DIP) in comparing with the American early childhood educators, (c) the previously trained SFLT teachers score higher on the DAP domains and lower on the DIP domains than the other two groups, and (d) familiarity with the SFLT

program, along with teacher's education level, years of teaching experience, and the total number of students in the classroom do not predict variations on the different domains of the DAP and learner-centered learning questionnaires.

Future studies need to use indigenous measurement instruments appropriate to Thai education to evaluate the impacts of the SLFT program on teachers' learner-centered beliefs and practices when more trainees become available, and possibly to include other teacher, student, and school variables.

Copyright 2007

by

Vasinee Israsena

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude sincerely to my advisor and my chair, Professor George S. Morrison, who has always encouraged me in my graduate studies and my life. He was the one who inspired me to be a professional in Early Childhood Education since I first met him in Thailand. Without him, I would never have these glory days in my life. Professor Morrison has always kept me working hard. When I need his help, he has always been there. He always teaches me to think positively and cheers me up when I have hard times. His kindness will be in my heart forever.

Secondly, I would like to extend my gratitude to Professor Michael Saylor who as my minor professor and my committee member for his mentorship in the field of Gifted and Talent Education. He also provided me many insightful comments on my dissertation. I appreciate the advices from other committee members and my co-advisors, Drs. Tommie Lawhon and Lloyd Kinnison, as well. They have enormously helped me in completing this dissertation. I also like to say “Thank You” to many professors at UNT for fulfilling my knowledge in all areas: Dr. Linda Schertz, Dr. Bill Brookshire, Dr. Ron Wilhelm, Dr. Paul Dixon, Dr. Randall Schumacker, Dr. Patsy Robles-Goodwin, and Dr. Carol Hagan.

I also offer thanks to all members at the *Success For Life Thailand* Center, to the educators at Petchaburi province for providing the *Success For Life Thailand* programs who helped me collect data, especially to Miss Suwanna Sangsunisai. I also felt gratitude to Mrs. Tipsuda Sumathasene and Dr. Voranart Ruksakultha. Let me say “Thank You” for all of the participants who kindly answered the questionnaires.

I am very grateful to my family and friends who have supported me to attain the highest education. Mr. Boonyeun and Mrs. Sri-arun Chandanabumma, my deeply loved grandparents,

and Pol. Gen. Pratarn and Professor Bang-orn Savangvarorose, my dear parents, have encouraged me to earn a doctoral degree from the United States. My husband, Mr. Saravudh Israsena Na Aythaya also has supported me enormously in a variety of ways. He has taken good care of our kids when I have studied in the U.S. My lovely children, Isr and Patcharaporn, have always cheered me through my graduate studies.

Special thanks to my beloved friends especially: Somsri, Jitpajong, Punwadee, Pornladda, Sasitorn, Jakkrit, and Sarun. Thanks also go to Dr. Changkuan (Charlie) Xu, my friend and the statistical consultant at the Center of Interdisciplinary Center at UNT, for his assistance in completing this dissertation. I would like to say “Thank You” to another friend, who has been important in my life and inspired me to earn my degree as soon as possible.

Finally, I am thankful to this country and its people for providing enriching experiences and opportunities in my life. I am thankful to gods, goddess and Lord Buddha for blessing me through my life.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES.....	vii
CHAPTER I INTRODUCTION.....	1
Background.....	1
Rationale for the Study	8
The Statement of the Problem.....	11
Purposes of the Study.....	11
Research Questions	12
Definition of Terms.....	12
Assumptions.....	13
CHAPTER II REVIEW OF LITERATURE.....	15
Theoretical Framework for Learner-Centered Education.....	15
Learner-Centered Education and DAP in the United States	18
Early Childhood Education in Thailand	29
Some International Early Childhood Program Models in Thailand	38
<i>Success For Life</i> and <i>Success For Life Thailand</i>	42
CHAPTER III METHODOLOGY	51
Participants.....	51
Measurement Instruments.....	52
Data Collection Procedures.....	55
Translation of the Questionnaires	56
Data Screening Strategies	57
Data Analysis Strategies	59
CHAPTER IV RESULTS.....	61
Examinations on the Psychometric Properties.....	61
The Current Status of the Thai Educators on DAP and Child-Centered Learning.....	66
The Group Differences on the DAP and Child-Centered Learning.....	69
Predictions on the DAP and Child-Centered Learning.....	74
CHAPTER V DISCUSSION.....	79
Summary and Discussion.....	79
Contributions and Limitations	84

Implications.....	85
APPENDIX A THE RESIDUAL PLOTS AND NORMAL PROBABILITY PLOTS	87
APPENDIX B PERMISSIONS TO USE THE QUESTIONNAIRES.....	100
APPENDIX C AN EXAMPLE OF THE SFLT TRAINING SCHEDULE	104
REFERENCES	106

LIST OF TABLES

	Page
Table 1 <i>Skewness and Kurtosis and the Z scores</i>	59
Table 2 <i>Alpha Coefficients on the Teachers Beliefs and Practices Survey</i>	62
Table 3 <i>Alpha Coefficients on the ALCP</i>	62
Table 4 <i>Intercorrelations among the Subscales on the Teachers Beliefs and Practices Survey</i> ..	64
Table 5 <i>Intercorrelations among the Subscales on the ALCP</i>	65
Table 6 <i>Importance of the Six Sources and the Group Differences</i>	67
Table 7 <i>Descriptive Statistics on the DAP factors</i>	68
Table 8 <i>Descriptive Statistics on the ALCP factors (N = 88)</i>	69
Table 9 <i>Descriptive Statistics of the DAP factors and the Group Differences</i>	71
Table 10 <i>Descriptive Statistics of the ALCP factors and the Group Differences</i>	73
Table 11 <i>Regression Results for Predicting Variations on DAP</i>	77
Table 12 <i>Regression Results for Predicting Variations on the ALCP</i>	78

CHAPTER I

INTRODUCTION

Background

Education in Thailand is considered to be a continuing life-long process that promotes the quality of life for its citizens, enabling them to live a useful life in society. The objectives of education in Thailand are: (a) to support a sense of respect for one's own and others' rights and duties; (b) to foster self-discipline; (c) to inculcate a law-abiding habit and devotion to religious and ethical principles; (d) to promote an understanding of the role of a citizen in a democratic government with the King as Head of state; (e) to inculcate a sense of responsibility toward the nation, the community, the family and oneself; and (f) to promote consciousness of belonging to the Thai nation, as well as to the human race as a whole, to have national pride, concern for national security and an active interest in national protection.

The important issues of primary education in Thailand are survival, security, and happiness for all in the Thai society (South East Asia Education Minister of Education Organization Regional Center of Educational Innovation and Technology, 2005b). Life-long learning includes formal, non-formal, and informal education spanning from birth through death. It includes the development of the human personality, intellectual, and other skills. It also aims at enhancing the living experience and fulfilling the vocational and social ambitions for all of the people in all ages (Office of the National Education Commission of Thailand, 2000c). To support life-long learning, it is essential to have a quality of education. Thai education, especially early childhood education, may need to seek a shift from the teacher as the center of the teaching-learning process to a child-centered model because early childhood is the basis of all education.

Thailand: The Nation

Kingdom of Thailand is located in Southeast Asia, bordering Laos and Cambodia to the east, the gulf of Thailand and Malaysia to the south, and the Andaman Sea and Myanmar to the west. Siam is the previous name of Thailand. “Thai” meaning freedom in the Thai language is also the name for the majority Thai ethnic group. Climate is warm and humid with seasonal monsoons. Official national language is Thai, but English is widely spoken in big cities such as Bangkok (Minister of Foreign Affairs of Thailand, 2006). Thailand is divided into four natural regions: the mountains and forests of the north, the vast rice fields of the central plains, the semiarid farm land of the northeast plateau, and the tropical islands and long coastline of the peninsula south. There are 76 provinces in Thailand. Bangkok, the capital city, is the center of political, commercial, industrial, and cultural activities. Thailand is a constitutional monarchy with His Majesty Bhumiphol Adulyadej, or King Rama IX, the ninth king of Chakri Dynasty, the present king. His majesty the King is recognized as the head of the state, the head of the Armed Forces, the upholder of the Buddhist religion and the upholder of all religions. Thai people speak and write Thai Language. Ninety-five percent of people in Thailand are Buddhists and another four percent are Muslims (Tourism Thailand Organization, 2006).

History of Education in Thailand

There are various ways to look back the history of the Thailand’s Education. Vasinsarakorn (2003) divided it into three periods: (a) The old five periods: Before Sukothai dynasty (before 1238), Sukothai Dynasty (1238-1378), Sriyuthaya Dynasty (1350-1770), Thonburi Dynasty (1770-1782), and Early Rathanakosin Dynasty (1782-1871); (b) Educational revolution that is from the period of King Rama V to King Rama VII (1871-1972); and (c) Democracy (1972 to the present) that started since Thailand has had democracy until now.

Pitiyanuwat and Sujiva (2005) stated the Thailand's Education history can be classified into four periods: (a) the "Pre-Modernization" Period (before 1870); (b) the initial stage of Modernization Period (1870-1932) started in the King Rama V era in which education was described as a means of national security and modernization; (c) the Modernization Period (1932-1978); and (d) the Modernized and Developed education Period (1978 to the present). In the Modernization Period, education played major roles in preserving cultural heritage, preparing good citizenship for democratic system, strengthening national identity, and highlighting "national development and manpower training" in response to social and economic demands of the country. The first National Education was created as a direction of education development in this period. New curricula were implemented at both the elementary and secondary levels in the Modernized and Developed education Period.

The Ministry of Education Government of Thailand (1998) offered another view in the three major periods of Thai education. The Early Development period started in the 13th century when Sukothai was the capital of Thailand until 1781. In 1238, King Ramkamhang the Great originated the first Thai Alphabet that had roots of language from Mon and Khmer. Throughout the centuries, Thailand has had two types of education: only princes and sons of nobles were able to enjoy education at the Royal Institution of Instruction (Rajabandit) and education for the Buddhist monks to commoners. The Ayuthaya Dynasty (1350-1767) provided education to the boys of noble birth and commoners. The unequal education system was accepted by the court and the then people of Ayuthaya and still existed in the early reigns of the Bangkok period. The Reform and Modernization period started after the Thonburi Dynasty in 1782 when King Rama I, the first King of Chakri Dynasty, founded the city of Bangkok and reformed the Buddhist Church making it as the site for public education. In the mid 1800s, the Western missionaries,

merchants, and the printing press entered Thailand. During King Rama V (1851-1865), the western countries, especially England, had power in Asia. Thailand is the only country in South East Asia that has never been colonized by a Western power. King Rama V believed that education was the most important chore to do because education was fundamental to developing the country's success (Ministry of Education Government of Thailand, 1998). However, he did not fulfill his idea. The ideas of temple as the center for education and monks as the teachers were well-known during the era of King Rama V (1868-1910) (Moonsilp, 1998). In addition, he supported teaching Thai for young princes and sons of nobles in the Grand Place. The National Lessons (Luksootproyok II or High School Curriculum in English), the assessment policy, and the National Curriculum were occurred. King Rama V decided to modernize the education in Thailand and emphasized English learning as a vital part of the new education in Thailand (Ministry of Education Government of Thailand, 1998). He established girls' school, Sunanthalai, and a school for preparing soldiers, Suankulab. In addition, King Rama V permitted the establishment of private schools. The Mahanparam School was the first private school in Thailand. In 1871, the Command Declaration on Schooling was issued establishing formal education. But the education system at that time was essentially offered only for the elite. King Rama V supported teachers to improve their teaching, and established the Division of Education (Vasinsarakorn, 2003).

In 1892 during King Rama VI's era, the central educational governing agency, the Department of Education, or the current Ministry of Education was created (Ministry of Education Government of Thailand, 1998). In 1898, the first Education Plan divided the national education into two parts: education in Bangkok and education in the provinces. This education plan had been revised and changed to the National System of Education which divided education

into two categories: general education and professional or technical education (Ministry of Education Government of Thailand, 1998). King Rama VI supported the establishment of schools instead of using temples as the educational sites. He also founded Chulalongkorn University, the first University in Thailand in 1916 (Vasinsarakorn, 2003). In 1932, Thailand's political system changed from the traditional systems of absolute monarch to a constitutional monarchy system. The first National Education Scheme was established in 1932. In 1977, Thailand's education system was modified from a 4-3-3-2 structure to a 6-3-3, wherein 6 years of primary education is followed by 3 years of lower secondary school and another 3 years of upper secondary schooling (Ministry of Education Government of Thailand, 1998).

Education in Thailand

Education in Thailand has three types: (a) formal education, (b) non-formal education, and (c) informal education. Formal education is provided at two levels: basic education and higher education. Basic Education is the education before higher education that includes pre-primary, six years of primary education, three years of lower secondary education, and three years of upper secondary education. The institutions that provide basic education are early development centers, schools, and centers for learning. Higher education includes universities, colleges, and other types of institutions. There are two levels of higher education: Associate's degree or diploma level, and the degree level (Office of the National Education Commission of Thailand, 2004).

Non-formal education services are found in both the public and private bodies outside the school system for the early childhood population, individuals of school-age who have missed formal schooling, and individuals older than the school-age population. Non-formal education includes: (a) provision of non-formal education for preschool children, (b) provision of

fundamental education for literacy, (c) provision of general non-formal education, (d) vocational non-formal education, and (e) quality of life improvement activities. Provision of non-formal education for preschool children provides services to two to six year-old children or from birth to the age of six, either in early childhood development centers run by the local communities for children aged three to six years, family-based early childhood care arrangements, or child development centers of the private sector by the Council of Early Childhood and Youth Development Organizations. Non-formal education also supports literacy development for the illiterate adults over age fourteen. The following organizations provide literacy education: the Literacy Campaign, the Functional Literacy Program, the Promotion of Thai Language Usage for the Thai Muslims in Southern Border Provinces, and the Hill Area Evaluation. Provision of general non-formal education provides continuing education programs for those missed the formal education. The Ministry of Education (MOE) offers vocational non-formal Education through polytechnic centers, industrial and community colleges under the supervision of the Office of Vocational Education Commission and the Office of the Ministry of Agriculture and Cooperatives, and the Ministry of Labor. The Minister of Education (MOE) and other agencies are responsible for education services in quality of life improvement activities. Welfare and public services provide training activities related to quality of life improvement to the general public (Office of the National Education Commission of Thailand, 2004).

Informal education means that the learners learn by themselves according to their interests, potentials, readiness and the opportunities available from the individuals, society, environment, media, or other sources. Informal education programs are supported by libraries, museums, science/technology centers, as well as the mass media such as radio, television, newspapers and magazines. In addition, the community learning networks play an important role

in informal programs. The community learning networks include community learning centers, sub-district health offices, and sub-district agricultural offices as well as natural learning sources in each community. Moreover, informally educated learners benefit from other sources such as family members, relatives and friends, local media, and local wisdom such as the culture and the body of knowledge in each community (Office of the National Education Commission of Thailand, 2004).

The National Education Act of B.E. 2542 (1999)

The Thai education system faces many challenges. Thailand wants urgently to reform the country for future economic success, stability, and dignity, and to compete with other countries in the age of globalization. Under this background, the Office of National Education Commission (ONEC) of the Prime Minister's Office implemented the National Education Act of B.E. 2542 in 1999 (Office of the National Education Commission of Thailand, 1991a, 1999e). This Act stated the primary problems in the Thai education system included "unsatisfactory curricula, the outmoded learning-teaching methods, inadequate quality of teachers, students' problems, non-standardized educational criteria, and too much freedom of writing textbooks" (Office of the National Education Commission of Thailand, 1999e, p.1). The principle objectives of the Act were to make sure that education strives for the full development of people in all aspects: physical and mental health, intellect, knowledge, morality, integrity, and the pursuit of a desirable lifestyle in accordance with society and in harmony with other people. The National Education Act is the nation's master legislation on education that will offer the structure for the education reform. The key areas of this reform are: (a) learning reform. It is the most critical component of the Act and is most important for learners; (b) administrative reform. It involves upgrading the teaching profession by recognizing systems for teachers, faculty, staff and

educational personnel, and increasing efficiency in the utilization of resources and investment for educational purposes; and (c) legislation reform. A range of legislation and regulations should be prepared and/or revised to support the successful the national implementation of the Act (Office of the National Education Commission of Thailand, 1999c).

The National Education Plan (2002-2006)

The National Education Plan (2002-2016), is based on the 1997 Constitution and the 1999 National Education Act, provides the principles and guidelines for the development of Thai education in order to prepare all Thai people for life-long learning. The Thai Constitution aims to increase the right of the Thai people in political participations and the right to voice public opinion on major social issues. Section 42 of the new Constitution affirms that all people should have both the right and duty to gain education and training as well as academic freedom. Sections 53, 55 and 80 also state the right to receive care and education for children, youth, women, the elderly, the underprivileged, and the handicapped. In aligning with the Constitution, the 1999 National Education Act aims at to introduce new initiatives and principles as well as guidelines for the comprehensive reform of education in Thailand. Both the 1997 Constitution and the 1999 National Education Act support the National Education Plan to (a) lead a knowledge-based economy and society, (b) promote continued learning, and (c) involve all segments of society in designing and decision-making concerning public activities (Office of the National Education Commission of Thailand, 2004).

Rationale for the Study

A critical issue in Thailand is that education should change from teacher-centered teaching to learner-centered teaching or child-centered teaching because it would improve the quality of education (Songsaree, 2001). Section 22 of the National Education Act of B.E. 2542

(1999) states “Education shall be based on the principle that all learners are capable of learning and self-development, and are regarded as being in the moment. The teaching-learning process shall aim to enable the learners to develop themselves at their own pace and to the best of their potentiality” (Office of the National Education Commission of Thailand, 1999d, p.12). This statement confirms that each individual is able to learn and is considered as the center of teaching-learning activities. Learner-centered education supports children’s enjoyment of learning to think, and discovering what interests them.

Child-centered teaching is advocated for young children as well as for the other age groups in Thailand. “When children between 0-5 years are appropriately educated, the power of the first five years provides the strength to enable the children to become high-caliber adults in the future” (Office of the National Education Commission of Thailand, 2000b, p.1). However, few early childhood teachers in Thailand have practiced learner-centered teaching.

Many factors influence teachers’ practices. In the West, teacher’s beliefs about child-centered learning, the school climate, and the available local school support are found to be influential variables (Kent, 2004). Various reasons may relate to the low degree of the child-centered learning practices in the field of early childhood education in Thailand. One of them is the lack of solid early childhood education curriculum based on child-centered learning. *Success For Life* is a brain-research-based ECE curriculum for children from birth through age six that supports young children’s active learning (Castro, 1998), shows a promise to meet the educational goals for young children in the 1999 National Education Act. Castro (1998) investigated the *Success For Life* Program in thirteen early childhood settings in the U.S. and found that infants and toddlers attending the program showed significant increases in skill

development and performance in the following areas: physical mastery, social relations/interactions, cognitive development, and emotional expression and well-being.

Success For Life Thailand (SFLT) is a learner-centered ECE curriculum model adapted to the Thai culture from the *Success For Life* program by Morrison at the University of North Texas in the United States. It is a program that reforms how teachers teach and children learn, improves lives of children and their families, enhances teacher education and training, helps eradicate poverty, and improves the socioeconomic status of children and their families (Morrison, 2006). *Success For Life Thailand* partners are Thai Ministry of Education, Kasetsart University, Phetchaburi Rajabhat University, and the *Success For Life* Center at the University of North Texas in the United States. *Success For Life Thailand* is a quality program for young children that may help Thai children succeed in learning. The quality of Thailand's educational system may be improved by implementing *Success For Life Thailand* into the system. Through the implementation of the program, Thai children may gain benefits, succeed in their learning and grow up to be good people in Thai society. Samahito (2003) studied the feasibility of implementing the *Success For Life* program in Thailand to meet the needs of Thai public policy and concluded that *Success For Life* was appropriate for the preschool level in Thailand.

However, due to the short history of the *Success For Life Thailand* program, many aspects of the program have not been explored. Dr. Morrison, the developer of the *Success For Life* and the *Success For Life Thailand* programs, the investigator, and Dr. Rungsang Arunpairoj Kasetsart University are collaborating with and through the *Success For Life Thailand* Center at Kasetsart University to conduct a research project in examining the effectiveness of the *Success For Life Thailand* program. This study is part of the effort in investigating the training effects

through examination of the three types of early childhood educators with different degrees of familiarity to the *Success For Life Thailand* program.

The Statement of the Problem

The Thailand Education Reform, B.E. 2542 (1999) described the importance of early childhood education between birth and five years of age as the foundation for all learning (Minister of Education Government of Thailand, 1999). However, United Nations Educational, Scientific, and Cultural Organization (UNESCO), Bangkok (2000) stated that the early childhood education in Thailand was unsatisfactory as evidenced in: “(a) Parental ignorance of the factors impeding or enhancing early childhood development, especially among families living in the rural areas; (b) the lack of resources in local communities and rural areas for establishing programs; (c) the insufficient stimulations to facilitate children’s cognitive, social, physical development and education; and (d) the inadequate recognition of the importance of the early years (0-5) in the Thai society” (p.1). High quality programs should be implemented to support the quality of early childhood education in Thailand. In Dorticulor, with the Thai Government emphasis on learner-centered education there is a critical need to access learner-centered ECE programs such as Success For Life Thailand to determine their effectiveness in promoting and supporting child-centered approaches.

Purposes of the Study

The purposes of the present study are: (a) to describe Thai teachers’ beliefs about the developmentally appropriate practices and the learner-centered education, (b) to access the impact of the *Success For Life Thailand* program on teachers’ learner-centered beliefs and

practices, and (c) to explore if other variables, in addition to the familiarity to the SFLT model, relate to teacher's child-centered beliefs and practices.

Research Questions

The following 7 questions are explored in the present study:

1. To what extent do Thai early childhood teachers currently possess DAP beliefs?
2. To what extent do early childhood teachers implement DAP in their classrooms?
3. To what extent do Thai early childhood teachers currently understand the learner-centered beliefs?
4. Are there any differences among three groups of early childhood educators on DAP?
5. Are there any differences among the same three groups of early childhood educators on learner-centered teaching?
6. Are there any salient factors influencing Thai teachers' DAP beliefs?
7. Are there any significant factors influencing Thai teachers' beliefs about learner-centered education?

Definition of Terms

Learner-centered teaching provides experiences for students and aims to support students' learning, thinking, exploring, working and concluding knowledge. Students are able to work with others and apply their knowledge (Minister of Education Government of Thailand, 2001).

Developmentally Appropriate Practices (DAP) is a learner-centered teaching, cognitive developmental approach to early childhood education. The concept of developmental appropriateness can be separated into three dimensions: age appropriateness, individual

appropriateness, and cultural and social context appropriateness. The DAP is based on the theories of Dewey, Vygotsky, Piaget Erickson, and information-processing that reflect an interactive, constructivist view of learning (Bredekamp & Copple, 1997).

Belief, in philosophy means “commitment to something, involving intellectual assent. Philosophers have not reached a consensus on whether belief is active or passive. For instance, René Descartes held that it is a matter of will, whereas David Hume thought that it is an emotional commitment, and C. S. Pierce considered it as a habit of action (The Columbia Electronic Encyclopedia, 2005).

The *Success For Life* is a program that was developed by a team of educators and researchers at the University of North Texas under the supervision of Professor George S. Morrison. This program integrates brain research findings into a learning system, which prepares children with cognitive, linguistic, socio-emotional, physical, and behavioral skills essential for learning and living. The components of *Success For Life* include academics and reading, family education, research and evaluation, teacher training and technical assistance, and educational technology (Samahito, 2003). *Success For Life Thailand* is a learner-centered model that meets the standards of the Ministry of Education in Thailand. It has been customized to the Thai culture from *Success For Life*.

Assumptions

The cultural relevance of the used measurement instruments and the reliable data were central to the present study. This study in large part relied on the following major assumptions: (a) The questionnaires translated to Thai from English maintained the conceptual validity, (b) the questionnaires on the targeted variables had acceptable construct validity for the sample, (c) teachers understood and answered the questions on the questionnaires honestly, (d) each

participant answered the questionnaires independently, and (e) teachers with the *SFLT* training gained knowledge about learner-centered and DAP education.

CHAPTER II

REVIEW OF LITERATURE

Theoretical Framework for Learner-Centered Education

The theoretical framework for the learner-centered learning and teaching started with Jean-Jacques Rousseau (1712-1778) who believed that the natural goodness, independence, self-love, compassion, and equality of human beings should be involved in education. Rousseau stated the child was important as himself/herself, and should be regarded as a self-active soul. He viewed the primary purpose of education as identifying and drawing out the special nature of childhood (Lascarides & Blyth, 2000). Rousseau recognized that children were different from adults both in learning and thinking. Childhood is a stage of development in which the child connects to the environment, employing it to suit personal interests. Children have to choose their learning experiences (Henniger, 2002). Children gain experiences when they play or do activities. When they play, they solve problems by testing, exploring with the purpose of constructing their knowledge (Lascarides & Blyth). Rousseau's ideas of natural education promote and support qualities such as happiness, spontaneity, and the inquisitiveness associated with childhood (Morrison, 2004).

Friedrich Wilhelm Froebel is often credited as "the father of kindergarten" (Gordon & Brown, 2004; Morrison, 2004). Inspired by Rousseau's works, Froebel dedicated his life to developing both a program for young children as well as a system of training for kindergarten teachers (Morrison, 2004). Froebel claimed that childhood is the period that a child develops his/her first connections with the environment, and it is essential to develop the child. Therefore, the child's environment should be clearly and accurately presented. Froebel developed his educational theory based on his observations of how children learn and what they like to do. His

book, *The Education of Man*, describes how to develop human being from birth through childhood, boyhood, to manhood. Froebel believed that play is the instinctive activity for the child and the natural method for a child's development. Play develops the child's mind and helps the child relate to the wider world (Lascarides & Hinitz, 2000). Froebel's theory reflects the idea of learner-centered education. He viewed each child as having individual learning differences. He stated that education should improve the individual according to the differences of each child's nature, not according to any random standard (Lascarides & Hinitz, 2000).

John Dewey is accredited with the popular terms of child-centered or learner-centered education, and child-centered schools. He believed that education should deal with the present lives of children, not focus only on preparing them for their future. Though Dewey's idea of curriculum is based on child's interests, teachers have a responsibility to plan for and capitalize on opportunities to use these interests to teach the traditional subject matters. This original idea is the beginning of the integrated curriculum, in which one subject area is applied to teaching another subject. His laboratory school emphasized children and their interests more than subject matters (Morrison, 2004). His school was a place for demonstrating, experimenting and observing. In addition, Dewey believed that curriculum should relate to activities familiar and natural to children, and connect to the basis and continuing needs of life such as shelter, clothes, and food, areas that focus on a developing curriculum. The curriculum was created upon themes, and it was community oriented. Children's interests in their homes, their environments, and in themselves were incorporated into the curriculum. Subsequently, children could acquire social and scientific awareness of the functions of persons in home, plants and animals, human life, and environment. Moreover, children had freedom to choose materials and activities (Lascarides & Hinitz, 2000).

Piaget's theories support the child-centered or learner-centered education as well. Piaget believed that children are active learners. They construct knowledge through physical and mental activities or they actively engage with a variety of manipulative materials in problem-setting and problem-solving activities (Morrison, 2004). Piaget's basic belief on development held that the child constructs his own knowledge and intelligence when he/she plays. Play is the basis for self-initiated activity while children construct characteristic ways of acting and thinking. Piaget believed that the child is potentially self-regulated with the capability of learning in directed, organized, and self-correcting ways of a logical thinking (Lascarides & Hinitz, 2000). Children develop cognitively through interaction with adaptation to the environment (Gordon & Brown, 2004; Morrison, 2004).

Lev Vygotsky viewed the child as a whole. He believed in the relation between culture and development, mainly the interpersonal connection between children and other important person. He claimed that social interactions between teachers and a learner offer both skills and the context and the cultural values of those skills (Gordon & Brown, 2004). The child, the other persons, and the social context come together when a child does an activity. The sociocultural-history context labels and forms children and their experiences, and children influence their cultures at the same time (Miller, 2002).

Vygotsky postulated the well-known theory of the zone proximal development (ZPD). The zone of proximal (nearby) development has two levels: what the child is able to perform independently, and what the child is able to perform only with help (Wortham, 2002). Adults help children participate in these activities. They assist them to adapt their knowledge to a new situation. Adults support them in trying out their emerging new skills. Children share in the views and values of the more experienced partner, give their own views and relate in the process

to find a common ground (Miller, 2004). Vygotsky believed that the relationships between language and thought in childhood have also affected teaching and language learning in the early year (Henniger, 2002). When a child uses language, he/she is applying a system of meanings constructed by his/her culture that forms his/her effort to make sense of his/her world (Miller, 2004).

In addition to the above theories, there are many other works in the modern history emphasizing children's active agency in development and education such as the information-processing theory, the bioecological theory (Bronfenbrenner, 1979), and Montessori's contributions (1870-1952). In short, the child-centered beliefs were prevalent in the developmentalists and educational theorists. They all have believed that children should be the center of learning and children learn better what they are interested. These ideas have served as cornerstones for the modern early childhood education (Bredekamp & Copple, 1997).

Learner-Centered Education and DAP in the United States

The opposite positions of the developmentalist's child-centered education and the School Effectiveness Group's academic-oriented education have been long-lived and ongoing in the history of American early childhood-education (Walsh, 1989). Recently, this debate was rekindled when many U.S. political leaders reacted to what some educators labeled as a "crisis in education"- an alarming weakening of performance in student achievement that threatened America's national standing as compared to the student achievement in other industrial countries (McCombs, 2003a). The pendulum recently seems to have swung back to the side of School Effectiveness Group with the enactments of the Goal 2000: Educate America Act in 1994 and the No Child Left Behind Act of 2001. Both of the federal education laws stress the need for national standards in all academic disciplines and the need for the national and state assessments

that provided the accountability for student achievement of rigorous academic standards. Nevertheless, the child-centered philosophy has been prevalent among psychologists and educational theorists. For instance, the American Psychological Association Presidential Task Force on Psychology in Education (1993) established twelve learner-centered principles governing the school redesign and reform.

Among the many definitions of “learner-centered,” McCombs (2000a) defined the meaning of “Learner-Centered” as the perspective that couples a focus on both the individual learners and learning. The key factors on individual learners are their heredity, experiences, perspectives, backgrounds, talents, interests, capabilities, and needs. The learning component focuses on how learning occurs and how teaching practices could most effectively promote the highest levels of motivation, learning, and achievement for all learners. This dual view of the learner-centered education is consistent with the twelve learner-centered psychological principles advocated by the American Psychological Association’s Board of Educational Affairs (American Psychological Association Presidential Task Force on Psychology in Education, 1993).

McCombs (2000b) further identified the learner-centered framework as follows: the learner and each learner’s views, needs and enthusiasm; chances of learning and the types of teaching and learning experiences that can support learner needs for achievement, belonging and independence; learning outcomes that consist of affective, cognitive, social, and performance domains; and the learning framework or atmosphere for learning such as expectations, teachers and technology assisting, time structures, and flexibility to student needs. In learner-centered schools, students decide their own projects, work at their own individual pace, and express their excitement about new learning things. Students also work with other peers from different ages, cultures and abilities; show their knowledge in unique ways; actively involve in individual and

group learning activities; and do more than the minimal assignments. McCombs (2000) also stated that learner-centered teaching also connects to the beliefs, characteristics, dispositions, and practices of teachers.

In addition to the theoretical formulations on learner-child education, McCombs and her associates developed standardized measures to identify the various critical components related to teachers' and students' perceptions of the learner-centered beliefs and classroom practices. For instance, McCombs, Lauer and Peralez (1997) examined the Learner-Centered Battery (Grade 6-12), a set of self-assessment and reflection tools for middle and high school teachers, and concluded that the Learner-Centered Battery (LCB) is useful as a self-assessment and reflection tool for teachers. The LCB is especially useful in identifying (a) students who did not recognize the positive classroom practices in the four domains measured by the teacher and student perceptions of classroom practices surveys and (b) potential changes in practices that can assist all students. Moreover, it was found that the students who had both low motivation and low achievement perceived the teacher practices in negative ways. Teachers may need to change their classroom practices to address these students' needs. The LCB is also a useful tool for teachers to identify those areas where modification in practice will have the highest impact. For the learner-centered education of young children from kindergarten to third grade, McCombs (2001) identified three central domains of classroom practices predicting students' motivations and achievements: (a) implementing positive relationships and classroom environment, (b) addressing individual differences, and (c) supporting learning and thinking skills. For middle and high school students, a fourth domain was used, respecting student's voice and offering choice and challenge.

Based on the earlier works by targeting on separate age groups, McCombs (2003a) further developed the Assessment of Learner-Centered Practices (ALCP), a survey tool to assess teachers at all levels, from kindergarten through college level. The ALCP could guide teachers to reflect on the following: their own beliefs and practices, the perceiving practices by students, and the impact of both teacher and student learner-centered variables on student motivation and achievement. The ALCP also addresses the instructional skills and practices of teachers that meet new educational requirements for teacher accountability and promote a positive cycle of shared responsibility for teacher development and learning.

Empirical studies under other theoretical frameworks and/or using other instruments also supported that the learner-centered learning and teaching is often associated with optimal student outcomes. For instance, Fasko and Grubb (1997) studied the implications of the Learner-Centered Psychological Principles and self-assessment tools for teacher education reform. They assessed (a) teachers' beliefs about learners, learning, and teaching; (b) teachers' perceptions of their classroom practices in domains practiced that were identified the principles; and (c) students' perceptions of teacher classroom practices in the same domains. The finding indicated that the effective teachers showed more implementation of learner-centered domains of practices than did the less effective teachers. Students' perceptions of their teachers' practices were also more predictive of high quality teaching. Schuh (2003) studied the nature and occurrence of knowledge-construction links (KCLs) in third- to sixth-grade classrooms and reported that: "In the more learner-centered classrooms, KCLs showed in combinations of divergent dialogue, positive reactions to students' uses of prior learning, and chances within the classroom that let students earn new experiences which they could apply to further knowledge-construction efforts" (p. 426).

Many other studies found teacher training is often critical to successfully implement the learner-centered practices. Daniels and Perry (2003) provided the following suggestions for the professional development of learner-centered teachers: (a) Teachers should first improve their habits and dispositions for examining classroom practices from children's viewpoints; (b) teachers then should give more time to talk with children about experiences as learners and individuals; (c) teachers should continue to evaluate children's academic, personal, and social progress with the purpose of promoting meaningful learning; and (d) teachers should finally have discussions with their children and observe and record their behaviors in authentic and meaningful ways. Daley (2003) recommended similar strategies for teacher training to support the learner-centered approaches. First, the trainer teachers should consider their own beliefs about teaching, learning, and understand their own views about teaching and learning. Second, the trainer teachers should analyze the career levels of the participating educators. Whereas the novice teachers may benefit more from the direct teaching in professional development programs, the expert teachers may learn more efficiently through dialogue and analysis of prior experiences and new learning. Lastly, the participating trainee teachers should improve their learner-centered repertoire of skills including strategies to assist student's knowledge construction and development of meaning and strategies to promote a conceptual understanding of the content and methods to link with learners' prior experience. In addition, concept maps, discussion, and dialogue may help teachers provide a learner-centered approach as they may assist teachers to encourage the learner to link the past and previous experiences with new information in a constructivist orientation.

The National Association for Education of Young Children (NAEYC) in the late 1980s proposed the Developmentally Appropriate Practices (DAP) as guidelines for the education of

young children up to age eight. The DAP is a learner-centered, cognitive developmental approach to early childhood education. The concept of developmental appropriateness has three dimensions: age appropriateness, individual appropriateness, and cultural and social context appropriateness (Bredekamp & Copple, 1997). The DAP is based on the many sound theories such as Dewey's, Vygotsky's, Piaget's, Erickson, and information processing that reflect an interactive, constructivist view of learning. The DAP includes the following teaching strategies: active learning, varied instructional strategies, balancing between teacher-directed and child-directed activities, integrated curriculum, and learning centers (Bredekamp & Copple, 1997).

DAP has been based on the following twelve psychological principles of child development and learning that inform developmentally appropriate practice: (a) the physical, social, emotional, and cognitive domains of children's development are closely associated. Development in one domain is affected by development in other domain; (b) development happens in a quite orderly sequence, with later abilities, skills, and knowledge building on those already acquired; (c) children have varied rates of development, and different areas of functioning; (d) children have early experiences in both cumulative and delayed effects, optimal stages occur for particular types of development and learning; (e) development continues in expected directions toward greater complication, organization, and internalization; (f) development and learning take place and are affected by various social and culture contexts; (g) children are active learners, and they learn through direct physical and social experiences as well as culturally conveyed knowledge to construct their own comprehending of the world around them; (h) interaction of biological maturity and the environment, which involves both the physical and social world, lead to development and learning; (i) the important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their

development is play; (j) when children have chances to practice newly obtained skills as well as when they experience a challenge just beyond the level of their current mastery, their development advances; (k) children express various forms of knowing and learning and various ways of presenting what they understand; and (l) Children feel psychological secure in the context of a community where they feel valued, their physical needs are met, and they develop and learn best (Bredekamp & Copple, 1997).

The National Association for the Education of Young Children (1998) also provided the following five broad educational strategies as the basic guidelines for developmentally appropriate practice: (a) creating a caring community of learner by encouraging the development of connections between adults and children, among children, among teachers, and between families and teachers; (b) teaching to boost development and learning by accomplishing a balance between guiding children's learning and following their initiatives; (c) creating appropriate curriculum by involving the subject matter, social or cultural values, parents' input, and the age and experience of children; (f) accessing children's learning and development to plan and establish appropriate curriculum; and (g) implementing reciprocally beneficial relationships by acquiring the knowledge through relationships with children's families especially the younger children. Copple and Bredekamp (2006) further stated young children learn best when (a) they have relationships with responsive adults, (b) they are actively involved both in and out of the classroom, (c) they use hands-on activities, and (d) they engage in activities with active thinking in investigating, questioning, and pondering the problems. Children construct their understanding of the world through active learning. Both teachers and principals are essential people who are able to provide learner-centered learning and environment of young children. If teachers and

principals believe in the learner-centered approach and apply teaching with learner-centered techniques, then the children will gain benefits from the teaching.

Numerous empirical studies in the United States have shown DAP is associated with desirable developmental and educational outcomes for young children. For instance, Huffman and Speer (2000) studied the effects of developmentally appropriate teaching practices on the academic achievement of kindergarten to first grade children attending urban schools. The researchers found that kindergarten and first grade children who attended the developmentally appropriate classrooms showed significantly higher scores on tests of letter-word identification and applied problems than children in the classrooms without the developmentally appropriate practices.

Maxwell, McWilliam, Hemmeter, Ault and Scuster (2001) studied the predictors of developmentally appropriate classroom practices in kindergarten through third grade. They wanted to understand the roles of teacher beliefs as a potential strategy for changing practices and how well classroom and teacher characteristics predict classroom practices. The results showed that both teacher's developmentally appropriate beliefs and practices related to positive social skills rating of children based on their newly developed observation measure of developmentally appropriate classroom practice in K-3rd grades.

McMullen (1999) also studied characteristics of teachers related to their DAP beliefs and practices. The study was to find a discrepancy between teachers' self-reported beliefs about the developmentally appropriate practices (DAP) and their actual, observable classroom practices. The findings indicated that teachers who both had an academic background in early childhood education or child development, and who had experience working in a preschool, had significant more DAP in their actual classroom practices than those who had an elementary education

degree and on preschool experience. In addition, the investigation on the prevalence of developmentally appropriate practices in the primary grades and the effects of teachers' developmentally appropriate beliefs and practices on first grade students' social skills and academic achievement in the areas of language and social skills showed that teachers' beliefs were not consistent with their practices. Students taught by teachers who held developmentally inappropriate practices had higher scores on the measure of language. Students whose teachers accepted practices that were not either appropriate or inappropriate had significantly higher mathematical achievement scores. Jones and Gullo (1999) also found that both developmentally appropriate beliefs and practices had been relevant to positive social skill ratings of children rated by their teachers.

Jambunatha, Bursts, and Pierce (1999) examined whether the use of developmentally appropriate practices in the classrooms was connected to the perception of self-competence among preschoolers. The results showed that the DAP related to children's perceptions of self-competence, especially in a perception of peer acceptance among young children. The practical implication of the findings is that the developmentally appropriate practices were quality approaches for early childhood educators.

Benson and Alat (2002) also studied the relationship between educational background and the philosophical orientation of early childhood educators who worked as caregivers and teachers of preschoolers, ages 3 to 6 years. More specifically, the highest level of education attained by the early childhood professionals and their educational backgrounds were compared to their self-reported beliefs about the best practice with young children, using developmentally appropriate practices (DAP) as the philosophy to comparison. The findings showed the participants with 4 years of college experiences or more, even if in an unrelated field, held

stronger DAP beliefs than those with less education, even if that education was a directly related field to early childhood education or to working with young children.

In addition to investigating the teacher, student, and classroom variables impacting teacher's DAP beliefs and practices, other studies extended to other ecological factors. For instance, Nelson (2000) studied how both personal and environment factors could influence early childhood teachers' practices. He focused on the relationship between teachers' beliefs and practices and examined whether teacher-directed (behaviorist) and student-directed (constructivist) beliefs supported or inhibited teachers' use of developmentally appropriate practices. The findings showed that teachers' personal beliefs were a greater determinant of their practices than environment factors such as support from colleagues and principals. Rushton and Larkin (2001) investigated how the learning environment might link to the developing mind by connecting the developmentally appropriate practices to brain research. They stated the brain research on how the growing mind learns shows the value of a constructivist approach to early childhood education where environments are designed to gain the learner's attention, foster meaningful connections with prior understanding, and maximize both short- and long-term memory through patterns and active problem-solving. Each unique learner has to feel challenged, but not fearful, so that an exchange of ideas promotes deeper understanding and leading to stimulating experiences.

Another area of the research interest on DAP has been on the operationalization of the DAP principles. Many measurement instruments in the forms of self-report and classroom observation have been developed. Among them, *Teacher Questionnaires* (Charlesworth, Hart, Burts, & Henandez, 1991), the *Teacher Beliefs and Practices Survey: 3-5 year olds* (Burts, Buchanan, Charlesworth, & Jambunathan, 2000 as cited in Kim, 2005), and the *A*

Developmentally Appropriate Practices Template (ADAPT) (Van Horn & Ramey, 2004).

Although all of the three instruments have claimed that they accessed the key principles of the DAP guidelines and had sound psychometric properties, they differed in the factor structures of the instruments and the data collection techniques. The first two developed by a group of ECE professionals at the Louisiana State University used the teacher's self-report to assess both their DAP and DIP (Developmentally Inappropriate Practices) beliefs and practices, whereas the ADAPT used classroom observations to derive three distinct but correlated factors: integrated curriculum, a social emotional emphasis, and learner-centered approaches.

It seems that DAP relates to optimal outcomes for children not only in the American culture, but in other cultures as well. For instance, in a sample of children from the Slovak Republic children, Gmitrova and Gmitrova (2003) compared between teacher-directed play with simultaneous involvement of all children's activity and child-directed play in various small groups. They reported a significant augment in cognitive manifestation during direction of playing process in small groups with frontal supervision of the lesson that is connected with better utility of powerful education engine of the free-play children. Kim, Kim, and Maslak (2005) studied how early childhood teachers in Korea understand DAP and follow DAP guidelines. They reported early childhood teachers in Korea had positive beliefs in DAP although it was doubtful whether these teachers distinguished the appropriate from the inappropriate employment of DAP. In a cross-cultural study on comparing beliefs about appropriate practice among early childhood education and care professionals in the U.S., China, Taiwan, Korea, and Turkey all accepted DAP beliefs and teaching practices. These included supporting social and emotional development, maintaining hands-on materials, and allocating play and choice in the curriculum (McMullen, Elicker, Wang, Erdiller, Lin, & Sun, 2005).

Both the learner-centered education and the DAP tend to yield desirable developmental and educational outcomes for young children. In fact, these two educational philosophies are highly linked (Bredekamp & Copple, 1997) and supported by empirical studies. They are alike in term of how they think about the role of teacher and child in teaching and learning. Both ideas relate to the needs and characteristics of individual learners, and the effect of social relationships on children's adjustment (Daniels & Perry, 2003).

In summary, the learner-centered and DAP educational philosophies have been prevalent in the American researchers and the professional organizations. Voluminous studies have demonstrated the learner-centered and the DAP education associates with positive child outcomes. The learner-centered and DAP education also seems to have some cross-cultural validity.

Early Childhood Education in Thailand

Early childhood education in Thailand faces many issues and challenges. For example, schools need to be improved; teachers and caregivers are lack of knowledge of child psychology; teachers teach children to remember, do homework, not allow to speak and express their ideas; schools need to have high standards; schools do not operate on the synthesized research and knowledge; community and parents are not involved in their children's learning; schools do not follow and evaluate children well; and schools do not use policies to guide practices (Chengkoon, 2001). Many teachers in Thailand do not understand the meaning of learner-centered teaching and do not know how to teach children correctly with the learner-centered approach (Songsaree, 2001). Songsaree (2001) further summarized six problems existing in Thailand for the learner-centered teaching and provided solutions to these problems as below:

Problem 1: Students have too many drill-based assignments.

Solutions: Teachers should reduce the number of assignment for students on constructing their knowledge and submit the assignment in one period. Teachers should let students choose activities that they are good at and interesting. Teachers collaborate to write lesson plan and apply integrated curriculums.

Problem 2: Teachers offer much content for students so that they are able to pass the university examination.

Solutions: Teachers teach students to gain knowledge, not to only remember. Teachers provide experience for students and support students' creativity.

Problem 3: Teachers should not only lecture students.

Solutions: Teachers make difficult content easy to understand; they may teach concepts.

Teachers use two-way strategies of teaching: lecturing and asking. Teachers use authentic assessment when they lecture students. In addition, teachers use materials to actively engage students while they teach.

Problem 4: Students should not only remember but they should also think creatively.

Solutions: Students remember what they should, such as formulas or poems, and they know how to apply them.

Problem 5: Teachers let students learn by themselves without teachers' guiding. Teachers let students work in groups and leave them to work by themselves.

Solutions: Teachers give information and pretest students to make sure that students understand the content. Teachers provide instructional activities based on the pretests that are appropriately challenging and fun activities.

Problem 6: Teachers use portfolios in all subjects without realizing students' readiness and needs.

Solutions: Teachers should use authentic assessment. Students, teachers and parents should assess portfolios based on well-defined rubrics that include assessments of creativity and problem solving in addition to assessing contents and skills. Students should choose the works that they like and are proud of to include in portfolios. (pp. 6-20)

Office of the National Education Commission of Thailand (2001) stated the current issues and problems of early childhood education in Thailand are:

1. There is little information provided to parents and guardians on raising children well. Parents did not know how to raise their children appropriately. They misunderstand about rewards, hitting and using harmful words with young children.
2. There is no training for staffs and teachers who work with young children. People who work with young children should understand child psychology and development.
3. There is no understanding of early childhood philosophy. Teachers in early childhood education have not been trained with the content knowledge of philosophy. Accordingly they do not understand why they have to create appropriate environments and experiences for young children.
4. There is no standardized oversight of early childhood services. Services for early childhood programs serving children younger than three years of age do not have standards that are enforced continually and no certification system for ensuring the quality of early childhood services is in place.
5. There is no well-organized management. Some principals and administrators of early childhood services do not have knowledge of early childhood education.
6. There is no research and synthesis of knowledge on early childhood education. Research

and new information on early childhood should be studied and applied to teaching early childhood education in Thailand.

7. There is no practice teaching or field experience prior beginning a career in early childhood education.

However, the importance of the early childhood education has been well recognized by the Thai government for the past several decades. Young children's right of development and education has been well acknowledged in a series of public policies. For instance, the Constitution of Thailand B.E 2540 section 53 states that the State has to look after children and adolescents who do not have any guardian. Section 80 defines that the state has to protect and improve children and adolescents and support family and community strength. The Eighth National Economic and Social Development Plan states the main approaches that are related to early childhood are the readiness for early childhood education and for marriages and families, supporting early childhood services, and helping children to have appropriate and qualified nutrition. The Eighth National Education Act (B.E 2540-2544) describes the policies for improving fundamental education to give opportunities for all Thai people to gain basic education before they marry. Newborn children should receive good care. In addition, the National Act aims at supporting all children to be ready at least one year before they enter first grade. The Committee of Prime Minister Chuene Leakpai provides the Educational Policy No. 2.6.2 guide parents about a basic policy of life, prepare young children to get ready for entering elementary school, and maintain education for early childhood.

Along with the recognition of the importance of early childhood education and its unsatisfactory status in Thailand, several national educational policies have been established to reform basic Thai education to a higher level of quality. The Thailand Education Department

(2003) established the following guidelines for Thailand Early Childhood Education: (a) provide appropriate curriculum. The curricula for early childhood should be based upon the ages and experiences of the children. The curriculum should be aimed at developing children's physical, social, emotion, and intellectual needs; (b) provide an appropriate environment for children's learning. The environment for learning should support children's needs and interests. In addition, the environment should be sanitary and safe. Teachers should provide an enriching environment with challenging activities and materials; (c) provide activities that support children's development and learning. Teachers should assist, guide, and learn with children. Children do activities and learn by themselves, and teachers should accept children's ideas and understand the children; (d) teaching in early childhood should use an integrated curriculum. In an integrated curriculum, children do a variety of activities related to a single topic, and children gain many skills and experiences the activities surround the top; (e) assessing developments and learning. Teachers should observe and assess children to evaluate their teaching and children's development. Teachers get information about children from their parents; and (f) collaboration between teachers and parents. Children are individual. Teachers should understand children's backgrounds and collaborate with parents.

The objectives of Thailand's child education policy are: (a) to implement community-based centers for providing information, advice, and help to families with regard to health care and family planning; (b) to provide quality, community-based and pre-primary schools; (c) to save children from harm by abusers and punish adults who violate or abuse children; and (d) to support women's rights, status, roles, and gender equity (Kamerman, 2002).

The Thailand Education Department stated that early childhood curriculum should be based on child development, learning, play, culture, and society. Children's learning should be

related to nature, development of each child, society and culture where children live. Children gain love, care and understanding to acquire a high quality of life and become more human. They feel that they are valued for themselves by society. Furthermore, the Thailand Education Department established the following twelve standards for the early childhood education: (a) Children grow according to their ages and have good health; (b) children have good large muscles and small muscles. Children are able to use their muscles well, and their muscles have good coordination; (c) children have good mental health and are happy; (d) children have a clear ethics, or sense of morals and have a good mind; (e) children appreciate arts, music, movements, and athletics; (f) children are able to help themselves appropriately to their ages; (g) children love nature, environment and to be Thai; (h) children are able to live happily with others and be good members of society under the democracy of Thailand that has the king as a leader of the nation; (i) children are able to communicate appropriately; (j) children are able to think and solve problems appropriately; (k) children have creativity and imagination; and (l) children have good attitude through their learning and have skills for finding information.

To reform education and achieve the desired new educational goals, teachers and children will change their traditional roles. Teachers will change from tellers to facilitators. Learners will learn by themselves with teacher's assistance (Kaewdang, 2006). Children will learn by themselves, and teachers will show them how to learn, where to learn, where to get information, and how to make use of it. The teaching-learning process will allow the learners to improve themselves at their own pace and to the best of their potential. Student-centered or learner-centered education is a teaching and learning method that uses proven teaching techniques and varied activities (Office of the National Education Commission of Thailand, 1999a). The Minister of Education Government of Thailand (2001) and Office of the National Education

Commission of Thailand (2000a) further elaborated that learner-centered teaching is to provide experiences for students, and it aims to support students' learning, thinking, exploring, working, and concluding knowledge. Students are able to work with others and apply their knowledge. Characteristics of teacher-centered teaching and learner-centered teaching are completely different. The characteristics of teacher-centered teaching are: (a) stimulus-response- reward, (b) pigeon training, (c) matching ring cross, and (d) construct meaning. On the other hand, the characteristics of learner-centered teaching are: (a) It is the way that teachers let students learn with their own ways according to their individual differences; (b) students construct their knowledge and improve their skills and attitudes by doing activities that teachers and students create; (c) teachers support students to practice analyzing and make decisions from information that students get; (d) students are active learners, not passive learners, and they enjoy learning; (e) teachers assist students in understanding the meaning of what they learn and relate to daily activities; and (f) students are able to conclude information and their own ideas, and they gain good attitudes towards learning.

Teachers should train their students to evaluate their learning and understand the weaknesses and strength of themselves. Then students understand how they learn. Teachers should support students' learning styles that are appropriate for them (Songsaree, 2001). Teachers are essential people in developing quality educational interventions. Teaching and learning methods will lead to a curricular process of pleasure where proficiency, kindness, and happiness are among the positive human traits included. Good teachers provide education according to on-going changes in the child, taking into consideration the fact that learning is not limited to the classroom or the same old texts only. Teachers should give priority to their students' interests because they are the ones who are learning. The learning process begins with

curiosity, followed by planning and learning activities through teacher-student interactions. Students should have opportunities to use cognitive skills such as thinking, analyzing, and problem-solving in the classroom (Office of the National Education Commission of Thailand, 2000e).

Teachers are not the only ones to play an important role in learner-centered teaching in their classroom. Administrators or principals also play important roles to support learner-centered teaching in their schools. Ministry of Education Government of Thailand (2001) stated that administrators or principals should be more alike curricular managers and less alike business administrators. They should develop their schools in light of education reform. The strategies that administrators enable to support learner-centered teaching include: (a) announcing the learner-centered teaching's policies, (b) planning the quality of education with other staffs, (c) providing seminars or workshop that help teachers to understand and develop skills on learner-centered teaching, (d) giving opportunities for students and teachers to work on the plans of quality assurance and do activities with schools, (e) providing lectures on schools' environment that support learner-centered teaching and work with community to apply learner-centered teaching, (f) enhancing teachers' standards and use authentic assessment to evaluate teachers, (i) supporting the use of materials and ideas in their environment to provide learner-centered teaching, which include intelligences, people and others, (j) supporting student committees, activities as well as curriculum that support academic learning and individual skills and interests, (k) promoting and report the outcomes of the school's administration to gain support from others, and (l) awarding people who work well and support involvement from others. Office of the National Education Commission of Thailand (2000a) suggested that it is important for learner-centered teaching to provide students opportunities to learn about what they want to

learn. Learner-centered teaching is not only just cooperative learning that teachers let children express their ideas and do their assignment but teachers should plan their teaching and activities to assist their students enjoy learning as well.

Researchers have shown that nothing is as wonderful as an infant's brain, and each child's brain has its own potential. The brain research has shown that the elements of environment and appropriate child-raising techniques enable change to the structure and the efficiency of human brain. The time between birth and five years of age is a most vital stage (Office of the National Education Commission of Thailand, 2000d). If the child's intellectual development during these years is neglected, the chance for further development is reduced. In the past, the Thai education has failed to achieve the educational goals because it has emphasized memorization from kindergarten all the way through the university level. Children's brain and social development as well as physical development should be emphasized along with their cognitive development. What a child learns at an early age influences behaviors in later life. The importance of all aspects of child development such as parents, mother's and father's role, disciplined upbringing and parent relationships should be realized. Moreover, the school environment should be positive for children (Office of the National Education Commission of Thailand, 2000d). Helping achieve good development begins before birth and continues through out the entire life. To develop the sustained quality of human life and protect against social problems, Thai education has to start teaching children in early childhood and to support families and communities to be involved in raising young children at every step. In addition, the guiding principles for developing young children from birth should be reached between the government and private agents to support parents' raising children with love and appropriate methods. The government of Thailand realizes the importance of child and family issues as the national policy. Fortunately, the

government of Thailand promotes family strength and acknowledges that families are the basic unit of economic development and shelter from social problems (Office of the National Education Commission of Thailand, 2001).

In summary, although the early childhood education in Thailand is changing, traditionally early childhood education has focused too much on rote learning and was built on the teacher-centered direct instruction. In the past two decades the government recognizes the value of early childhood education for young children before the elementary school. A series of educational policies were established to support the learner-centered education. Interestingly, although the term “Developmentally Appropriate Practices” is well known for early childhood teachers in the United States, early childhood professionals in Thailand are more familiar to the term of “learner-centered.”

Some International Early Childhood Program Models in Thailand

Over the past 20 years in additions to the indigenous Thai programs, several program models with the international backgrounds have begun in a number of Thai preschools and kindergartens. P.R. Sarkar, a well-known Yogi of India, founded the Neo-Humanist Education approach. He believed environment during childhood greatly influences the intelligence and virtue of children. Children need to play and learn. The components for being a perfect human include body, mind, kindness, and academics. The processes of learning should be based on four principles: lower brain waves, the co-ordination of brain cells, self-identity, and consciousness (Office of the National Education Commission of Thailand, 1999a).

Rudolf Steiner (1861-1925) developed the Waldorf Education. The Waldorf teachers believe that human beings achieve their highest potential by themselves and are able to set their own goals in whatever they choose. Waldorf seeks balanced personalities in children. The

Waldorf educational techniques are also been applied in the adult rehabilitation settings. Waldorf believes that the components or dimensions of humans are divided into three parts: body, soul and spirit. The three components are applied throughout the following activities: (a) the activities through hand movement. Humans do activities through hand movement and have the will to do the good things; (b) activities through emotions. Humans perform activities through emotions that are the fundamentals of human beings; and (c) activities through soul. Humans perform activities through thinking. They use wisdom to understand the truth. The development of a human's thinking is based upon a search for the truth and a desire to understand authentic situations. The Waldorf approach believes that children learn differently from adults. Young children from birth through seven years of life are unable to understand concepts well. They learn by doing, and environment is important for young children's learning. Teachers should provide an appropriate environment for young children. They should be good role models for children, too. Waldorf aims to teach children to be good humans. Waldorf schools provide materials from nature (Phanosot, 2000).

The Montessori approach promotes natured growth naturally according to the child's current developmental readiness and not as adults feel it should be. Montessori (1870-1952) believed that a child's education should begin at birth. Newborn children have extremely absorbent minds. Children from birth to six years of age absorb experiences from their environment such as language and culture. Children learn best from the real world. A child's senses and muscle coordination develop during infancy. A child learns to regulate self and make acquisitions. A child's sensitive period ends at about age five. Children should develop their intelligence using objects that they can see, hear, feel, and touch in their environment. Montessori realized the importance of the environment on young children: (a) the practical life,

(b) the sensorial area, (c) the language area, and (d) the mathematics area. Montessori's education focuses on three issues: (a) children's environment, (b) teacher roles, and (c) respect for children's personality (Costelloe, 1960/1972).

David Weikart (1931-2003) and his colleagues originally created the High/Scope curriculum to help poor children in 1962. This approach is based on Piaget's intellectual development theory. The High/Scope curriculum wheel includes active learning, classroom arrangement, content, daily schedule, and assessment. The ingredients of active learning are materials, manipulation, choice, words, and support. Children's routines are engaged with active, group learning in an interaction-oriented classroom. Plan-do-review is incorporated in the schedule with balance between teacher initiation and children initiation. Key experiences of the High/Scope curriculum are: creative representation, language and literacy, initiative and social relations, movement, music, classification, seriation, number, space, and time. Children's achievements are considered through authentic assessment with results recorded in a Child Observation Record (COR) (Morrison, 2004).

Loris Malaguzzi (1920-1994) developed the Reggio Emilia Approach of early childhood education. The Reggio Emilia approach supports the expression of a child's natural abilities to exhibit the child's own self. School atmosphere promotes the home and community. There is no specific, long-term, or short-term curriculum; instead the curriculum emerges from children's interests. Reggio Emilia is a child-centered approach. Teachers capture the topics from the talk of children, through community or family events, as well as the known interests of children (Office of the National Education Commission of Thailand, 1999e). Teachers work together to plan the projects and gather needed materials. Children learn through the project approach and art as well as social interactions and learning environments. Teachers observe and listen to

children and parents. Teachers and parents work together to help children and run the schools. The schools provide a beautiful environment. In 1990, Jackie Alexander, an owner of an international school in Thailand, studied about Reggio Emilia and applied the ideas of Reggio Emilia to her school in Thailand (Office of the National Education Commission of Thailand, 2000b).

The Project Approach is a part of the Reggio Emilia Approach, with emphasis on the principal of query, in which children try to find an answer either through group participation or individually. The objective is the learning process rather than getting the answer (Office of the National Education Commission of Thailand, 2000b).

The Whole Language Approach (1960s) is a theory of thinking that supports children learning to read and write. Children learn language from birth onward from environment like home and immersion in the world of language, books, and nature. Teachers understand children's language development including listening, speaking, reading and writing. To develop as human beings, people start by developing their thinking and language. This helps humans to think continually. The Whole language Approach is divided into 3 components: (a) creating environment with whole language, (b) the processes of whole language learning, and (c) teaching (Office of the National Education Commission of Thailand, 2000b; Thai-Israel Foundation, 2000).

In addition the above well-known models, there is another promising program desirable to the learner-centered-based reform in early childhood education in Thailand: *Success For Life*. In fact, this program has been implemented in the Thai schools for over eight years and has shown the positive results. The Thai version of the *Success For Life*, *Success For Life Thailand*, has been culturally tailored to the Thai early childhood education on an ongoing basis. Both the

original *Success For Life* and *Success For Life Thailand* are described in detail below.

Success For Life and Success For Life Thailand

Success For Life (1999) program was developed by a team of educators and researchers at the University of North Texas under the supervision of Professor George S. Morrison. This program integrates brain research findings into a learning system, which prepares children with cognitive, linguistic, socio-emotional, physical and behavioral skills essential for learning and living. Components of *Success For Life* include:

1. Academic and Reading (STAR): The STAR curriculum is instilled with neuroscience research and is related to Development Appropriate Practice (DAP), the Texas Essentials of Knowledge and Skills (TEKS), and the Head Start Performance Standards. The curriculum provides eight subject areas covering literacy, mathematics, science, creative arts, wellness and healthy living, technology, social studies, and character education.
2. Family education and support: *Success For Life* offers informational brochures, home learning kits, literacy, and music CDs to families. The purpose is to educate families to support an enhancement environment and provide learning at home. The topic of family education consists of school expectations, reading readiness, literacy, math, science, character education, physical education and community resources.
3. The objective of this component is as the follows: The objective of the component is to study the effectiveness of *Success For Life* and to show the indication of accomplishment and development improvement in young children. Families and teachers are assessed for changes in knowledge, beliefs and practices in the home and classroom.
4. Teacher training and technical assistance: The element of teacher training involves comprehensive training each year for child-care givers or teachers and their administrators.

Mentor teachers go to sites often to provide technical assistance and support to further enhance teaching and learning.

5. Educational technology: Educational technology is a powerful tool that can enhance the process of young children's learning and facilitate teachers' and parents' practices to gain the knowledge necessary for helping their children achieve in school and life. *Success For Life* employs technology to mentor teachers as well as discuss and model skills with individual as well as groups of teachers (Samahito, 2003, pp. 6-7).

The research bases for *Success For Life* includes the following (Morrison, 1999): (a) Development relies on the interplay between nature (trait characteristics) and nurture (environmental influences), that is, complex interactions that are highly variable between individuals; (b) early care and education. Optimal periods for learning can have a long-lasting impact on children's development, learning and behavioral outcomes; (c) the human brain has the outstanding ability and malleability to change in response to experience and environments (i.e., lifelong plasticity); (d) early music education has an impact on skill development and can enhance processes of learning and development; (e) music enrichment can provide cognitive and therapeutic benefits through the emotion systems. Music enhances enjoyment and the quality of life or an emotion effect; (f) early negative experiences may have dramatic and sustained consequences in children's overall development; and (g) over the last two decades, research evidence has shown the importance of prevention and early intervention. In other words, the timing of interventions (those that begin earlier) and the duration of interventions (those that last longer) are most influential in development and behavioral outcomes.

Morrison established the following goals for *Success For Life*: (a) enhancing and enriching the lives of children and families, (b) providing staff development that enables early

childhood professionals and others to help children learn and succeed in life, (c) promoting change in early childhood education through program development and preservice and inservice education, (d) integrating human development and neuroscience research into programs that benefit children, parents, families and teachers, (e) supporting academic and life success, (f) promoting literacy development and reading, (g) supporting teacher-guided learning activities, (h) supporting readiness activities that prepare children for school and life, and (i) enhancing young children's character development.

Morrison also stated teachers play the following critical roles in the *Success For Life* program: (a) spending a majority of time on instructional activities that support academic growth and real-life applications to life and work; (b) not criticizing children for their performances; (c) praising children for achievements and successes; (d) increasing children's opportunities to learn from the teacher, other adults, and peers; and (e) spending time daily directly teaching literacy, math, science knowledge, information and skills. *Success For Life* also aims to provide an appropriate classroom environment for young children based on the following guidelines: (a) neuroscience and human development research are infused into the curriculum, (b) materials are accessible to support exploration and learning, (c) teachers engage in both direct, systematic instruction and modeling for students, and (d) teachers guide children's behavior and help children be independent learners.

Most importantly, the *Success For Life* program connects to various critical brain areas (e.g., the four lobes of the brain, the two major language areas of the Broca's Area and the Wernicke's Area, the key emotion processing areas, and the brain hemispheres) to the curriculum so that all of the children's brains will be used and developed. Another uniqueness of this program is its emphasis on parent education, which is concord with the strong advocacy of

the parent involvement by the Thai government. Due to the solid neuropsychological research basis and the diverse components in an integrated way, *Success For Life* has been deemed as an appropriate early childhood program model by the Ministry of Education to meet the educational needs for the young children in modern Thai. Accordingly, *Success For Life* has been revised to *Success For Life Thailand* to adopt the unique Thai cultural characteristics with a collaboration among the Morrison's team in the United States, the Thai government, and the early childhood professionals in Thailand.

Morrison and his team initially developed *Success For Life Thailand* to meet Thailand's Education reform and standards in 1999. There were 5 integrated components in the original *Success For Life Thailand* Program: Technology, Curriculum Development, Professional Development and Technical Assistance, Family Education and Support, and Research and Evaluation. In 2006, Morrison revised the *Success For Life Thailand* program into 7 components of *Success For Life Thailand* as below:

1. The curriculum component of *Success For Life Thailand* has five basic components: (a) brain-based learning, (b) literacy-based learning, (c) mathematics, (d) integrated curriculum, and (e) instruction. These issues are closely related to the contents of the National Education Act of Thailand B.E.2542 (1999). The National Act informs that "...Knowledge and skills in mathematics and languages, with emphasis on proper use of the Thai language" [and] "Education shall aim at the full development of the Thai people in all aspects: physical, mental health, intellect, knowledge, morality, integrity, and desirable way of life so as to be able to live in harmony with other people" (p. 4 and 11). In addition, *Success For Life Thailand* supports the curriculum with thinking and reasoning, spiritual/religious,

technology, the whole child, and the ideas of the king's way about physical, social/emotional, cognitive, linguistic, and spiritual.

2. The cultural literacy and learning component promotes and assists Thai culture and the integration of Thai culture into the lives of children. It is consistent with the guidelines established by the Synopsis of the National Scheme of Education (2006): (a) "...integration of various aspects of education, religion, art and culture into the learning content, process and activities so as to enhance the learners' morality, integrity, ethics, values and desirable characteristics" (p. 16, #1); (b) "...development, promotion and creation of knowledge and learning relating to art, culture and local/ Thai wisdom, appropriately linked to universal wisdom" (p. 4, #2); and (c) "...promotion of activities relating to art and culture." (p. 24, #3)
3. The collaboration component is demonstrated in the collaboration among the Ministry of Education of Thailand, the *Success For Life Thailand* center at Kasetsart University, Petchaburi Rajabhat University, and the *Success For Life* center at the University of North Texas in the United States. This collaboration realizes the ideas of "...all segments of society participating in the provision of education" (National Education Act of Thailand B.E.2542 1999, p. 6) and "...partnerships with individuals, families, community organizations, private persons, private organizations, institutions, enterprises, and other social institutions." (p. 7)
4. The teacher education and development component supports early childhood educators' professional development in the following ways: (a) a development of a cadre of high skilled and highly qualified teachers who are instructional leaders, (b) development of teacher-leaders who can assist to reform early childhood education and Thai Education, (c) professional certificate programs endorsed by the *Success For Life Thailand* faculty, and (d) expansion of teacher education and development programs to other provinces. The *Success*

For Life Thailand center have offered three large workshops to a total of 116 university faculty members, early childhood education teachers and administrators in 1999, 2000, and 2006. The workshop usually runs for two weeks (see an example of the training schedule in Appendix C).

5. The research and dissertation component encourages both teachers and other professionals related to early childhood education to provide research to improve the education of young children, to improve teacher education, to provide evidence for curriculum and materials, and to continue research for three years.
6. The family involvement component encourages family involvement in learner-centered approaches, and develops ways to involve community agencies and leaders in the learner-centered approaches as advocated in the National Education Standards. The National Education Standards (2005a) section 24, item six stated “Families, communities and organizations at all levels combine efforts in creating and benefiting from knowledge. There will be exchanges of learning until learning becomes part of life.” (p. 14).
7. The component of implementing the King’s way to serve the king assists the ideas of the King by helping eradicate poverty, helping children understand the land, and helping children know their history and culture. As Thailand is a developing country, in 1997, his Majesty King Bhumibol Adulyadej of Thailand offered the idea of self-sufficiency. He stated that “Having enough to live on and to live for means self-sufficiency. If everybody has enough to live on and to live for, that is good. And if the whole nation reaches that status, that is even better...” and “...Formerly, Thailand had enough to live on and to live for” (The Chaipattana Foundation, 1996, p.1). His Majesty further explained the concept of self-sufficiency as that whatever we produce and we have enough for our own use. We do not have to borrow from

other people. We can rely on ourselves, like what people say, we can stand on our own legs. But self-sufficiency carries a broader meaning. It means having enough and being satisfied with the situation. If people are satisfied with their needs, they will be less greedy. With less greed, they will cause less trouble to other people. If any country values this idea - the idea of doing just to have enough which means being satisfied at a moderate level, being honest and not being greedy, its people will be happy. “Being self-sufficient does not restrict people from having a lot, or possessing luxurious items, but it implies that one must not take advantage of others. Everything must be within its limits. Saying what is necessary, acting just as needed, and working adequately. ...Therefore, self-sufficiency here means within proper bounds and reasons” (The Chaipattana Foundation, 1996, p.1).

There are three primary standards in Thai’s National Education Standards. The first standard is about the describable characteristics of Thai people, as both citizens of the country and members of the world community: “The Thai people will be competent, virtuous and lead a happy life” (Office of the National Education Commission of Thailand, 2005a, p. 3). The second standard establishes the guidelines of educational provision: “Emphasis on learner-centered approach and school-based administration for education provision” (p.3). The third standard includes the guidelines for creating learning society/knowledge society: “Enhancing ways of learning and strengthening learning sources” (p.8). Morrison (2006) claimed that the *Success For Life Thailand* program implements the National Education Standards in Thailand with the above seven components.

Teachers and administrators in the *Success For Life Thailand* program have different but complementary roles. They all aim to support learner-centered learning. The teacher’s primary roles are: (a) implementing a learner-centered approach, (b) arranging the enrichment to support

the learning-centered and active learning, and (c) using a combination of formal and informal instructional strategies to implement the learner-centered and active learning. Administrators are chiefly responsible for (a) assisting a learner-centered approach to education, and (b) supporting and collaborating with teachers, students and families to enhance teaching and learning (Morrison, 2006).

In summary, *Success For Life Thailand* is a quality early childhood program for Thai children from birth to six years of age that promotes cognitive, physical, social and emotional development, which is based on neuroscience and early childhood research. It is a learner-centered model of early childhood education that: (a) meets the Ministry of Education's standards for a program that will help reform how teachers teach and children learn; (b) is based on research, the best practices, and the learning theories; (c) had been field-tested and used by over 250 teachers and 4,000 children in the United States; (d) is endorsed by parents; (e) supports a child-centered approach in which children are active learners; (f) is developed for Thai children and supports Thai culture, customs, and beliefs about children; and (g) does not require special materials. Materials are already available in most classrooms (Morrison, 2005).

In addition to its solid theoretical foundation, studies have shown that children who have participated in the *Success For Life* or *Success For Life Thailand* program demonstrated improved learning and social skills (Samahito, 2003; Castro, 1998). Moreover, parents whose children attended this program gained better knowledge relating to the education and care of their children. Nevertheless, the studies on *Success For Life Thailand* have been limited. Samahito conducted the only study on *Success For Life Thailand* with a sizable sample of 46 educators in six preschools implemented the *Success For Life Thailand* program through interviewing and journal reflections and concluded and concluded *Success For Life Thailand* is

appropriate for the preschools in Thailand. There are many issues related to *Success For Life Thailand* reminding unexplored.

CHAPTER III

METHODOLOGY

Participants

The investigator collaborated with the *Success For Life Thailand* Center at the Kasetsart University in Bangkok, Thailand. Three types of early childhood education teachers and administrators participated in the study: individuals being trained on *Success For Life Thailand* in Petchaburi province, teachers and principals previously trained on *Success For Life Thailand* in Bangkok, and early childhood teachers and principals without knowledge of *Success For Life Thailand*. In August 2006, Morrison and his team offered a 2-week training session on *Success For Life Thailand* to 52 early childhood teachers and principals in Petchaburi. In December, these educators met together to evaluate the training program and were requested to participate in the study. This group was designated as the currently- being- trained group. Forty-five out of fifty-two returned the questionnaires. Among them, 43 were teachers and the other 2 were principals.

In 1999 and 2000, the *Success For Life Thailand* Center at Kasetsart University offered training sessions to 64 early childhood professionals, primarily residing in Bangkok. Among them, 53 were early childhood education practitioners and the remainders were university faculty members. Between 2000 and 2005, the *Success For Life Thailand* center did not offer training sessions to a large group of the teachers and principals. Therefore, the trained practitioners in 1999 and 2000 were selected as the previously trained group. Seventeen out of the forty-three teachers returned the surveys.

Because the first group (i.e., currently being trained) was from Petchaburi, an economically disadvantaged province in Thailand, the present study selected early childhood

educators from the same geographic area as the control group, that is, the last group without any knowledge about the *Success For Life Thailand* program. An official in the division of education at Petchaburi Province offered help in finding the educators for the control group by matching the key school variables such as the school size, type, and region in terms of community socioeconomic status between the first and last groups. Among the 52 teachers contacted, 33 teachers returned the questionnaires. As this relatively low return rate may make this group systematically different from the first group, the comparability of the two groups was examined on the key teacher demographic variables. Results showed that there were no differences between the two groups on the key teacher and classroom variables-teacher educational level: $\chi^2(2) = .939, p > .05$; educational background in terms of majoring in early childhood education or elementary education: $\chi^2(3) = 2.197, p > .05$; total years of teaching experiences: $t(60) = .109, p > .05$; teaching years in the current school: $t(60) = -.936, p > .05$; total teaching years in the early childhood education classroom: $t(46) = -.323, p > .05$; and the total number of students in the current classroom: $t(53) = 1.039, p > .05$. In summary, the two groups in Petchaburi seem to be comparable.

Measurement Instruments

Two questionnaires were used in the present study. The first instrument was the *Teachers Beliefs and Practices Survey: 3-5 Year Olds* (Burts et al., 2000). Burts and her associates developed the survey based on the Developmentally Appropriate Practice (DAP) advocated by the National Association for the Education of Young Children (Bredekamp & Copple, 1997). This questionnaire has the 43 itemed beliefs scale and the 30 itemed instructional activities scale. The first question in the teacher beliefs scale asks teachers to rate the relative importance of 6 different sources (i.e., parents, school system policy, principal/director, teacher, government and

other teachers) in influencing their students. Teachers assigned mutually exclusive numbers to these sources with the anchoring points of 1 as the most important and 6 as the least important. The rest of the 42 items measure teachers' attitudes toward developmentally appropriate practices with a 5-point Likert scale: 1 = *Not at all Important*, 2 = *Not Very Important*, 3 = *Fairly Important*, 4 = *Very Important*, and 5 = *Extremely Important*. These items were designed to measure both the developmentally appropriate and inappropriate beliefs about early childhood education in teachers.

Kim (2005) stated these 42 items loaded on three factors: DAP Beliefs with 17 items (i.e., items 3, 4, 5, 8, 9, 12, 13, 16, 18, 21, 22, 23, 25, 26, 28, 29, and 33), DIP Beliefs with 15 items (i.e., items 2, 7, 10, 11, 14, 15, 17, 19, 20, 24, 31, 29, 40, 41, and 42), and Context Appropriate Practices Belief including the attitudes toward Family, Culture, and Inclusion (FCI) with 9 items (i.e., items 6, 27, 30, 32, 34, 35, 36, 37, and 38). The internal consistency reliability coefficients in Cronbach alpha in Kim's sample of 375 U. S. teachers were .85, .82, and .81 on the three factors, respectively.

The same 3-factor structure was used in the present study. However, item three was not included in the present study due inadvertently missing response options missing in the translated version. The factor mean on the DAP beliefs was adjusted accordingly. Kim stated item 43 did not load on any of the three factors. It was excluded in the present study as well.

For the instructional activities scale, the teachers responded to each of the 30 items based on how frequently the particular appropriate or inappropriate practices occurring in their classrooms. Each item is assessed on a 5-point Likert scale: 1 = *Almost Never (less than monthly)*, 2 = *Rarely (monthly)*, 3 = *Sometimes (weekly)*, 4 = *Regularly (2-4 times a week)*, and 5 = *Very Often (daily)*.

Kim (2005) stated the activity scale has four factors based on the factor analysis in a sample of 375 U. S. early childhood education teachers: DAP Principles with nine items (i.e., items 3, 8, 19, 21, 23, 26, 28, 29, and 30), DAP Activities with nine items (i.e., items 1, 2, 4, 5, 6, 7, 9, 24, and 25), DIP Activities with nine items (i.e., items 10, 11, 12, 13, 14, 15, 16, 17, and 20), and DIP Classroom Practices with three items (i.e., items 18, 22, and 27). Kim reported the Cronbach alphas for the four factors were .82, .75, .73 and .59, respectively.

However, the preliminary analysis with the sample in the current study showed the alpha for the DAP Principles was .22, much below the .60 minimum acceptable threshold (Devillis, 1991). Instead, the two-factor structure (K. Kim, personal communications, April, 26, 2007) was used. The DAP Activities and the DAP Principles were combined into a DAP Practices scale, and the DIP Activities and the DIP Classroom Practices were merged into a DIP Practices scale.

The second questionnaire was the *Learner-Centered Education: the Assessment of Learner-Centered (ALCP) for K-3* (McCombs, 2001). This questionnaire contains 88 items in five parts: (a) A number of statements that teachers in Grades K-3 have used to describe themselves by using a 4-point Likert scale with the following anchors: 1 = *Strongly Disagree*, 2 = *Somewhat Disagree*, 3 = *Somewhat Agree*, 4 = *Strongly Agree*; (b) A number of statements that teachers decide how often they do what is described in the classroom by using a 4-point Likert scale with the following anchors: *Almost Never*, *Sometimes*, *Often*, and *Almost Always*; (c) A number of statements that teachers have used to described themselves by deciding to what extent they agree or disagree with a 4-point Likert scale with the following anchors: 1 = *Almost Never*, 2 = *Sometimes*, 3 = *Often*, 4 = *Almost Always*; (d) A number of statements that teachers decide the degree to which it is generally true of them as teachers by using a 4-point Likert scale with the following anchors: 1 = *Almost Never*, 2 = *Sometimes*, 3 = *Often*, 4 = *Almost Always*; and

(e) A number of statements that teachers have to read with a series of vignettes. Respondents consider each response option in terms of how appropriate to deal with the problem by rating each of four options for each vignette. There are five vignettes for each with 4-point Likert scale as follows: 1 = *Very Inappropriate*, 2 = *Somewhat Inappropriate*, 3 = *Somewhat Appropriate*, 4 = *Very Appropriate*.

The ALCP has both the student and teacher version in the same 88 items with the corresponding wording changes modified for the appropriate respondents. Only the teacher version was used in this study. In addition, as no data were provided by the original author for comparison for the last three parts, only the first two parts of the ALCP in 44 items were utilized in the present study. These 44 items assess teachers' beliefs about the child-centered learning and their perceptions of the classroom practices. The belief scale has fourteen items of learner-centered beliefs (i.e., items 1, 2, 4, 5, 7, 9, 11, 13, 15, 16, 17, 19, 21, and 22), and eight items of non learner-centered beliefs (i.e., items 3, 6, 8, 10, 12, 14, 18, and 20). The perception scale of the classroom practices has 22 items tapping on three factors: six items on creating positive interpersonal relationships (items 23, 31, 34, 35, 38, and 42), eight items on providing motivational support for students' learning (i.e., items 24, 26, 27, 29, 30, 39, 40, and 43), and eight items on facilitating students' thinking and learning (items 25, 28, 32, 33, 36, 37, 41, and 44). McCombs (2001) reported the internal consistency reliability for the five factors were .90, .75, .91, .86, and .90, respectively, in a sample of 122 K-3 teachers.

Data Collection Procedures

The investigator initially contacted the *Success For Life Thailand* Center at Kasetsart University for the feasibility to conduct a study to compare beliefs among the three groups of early childhood educators based on their familiarity to the *Success For Life Thailand* curriculum

(i.e., currently being trained, previously trained, and no knowledge of the *SFLT* curriculum).

After getting permissions from the UNT University Institutional Review Board (IRB) and the *Success For Life Thailand* Center, the investigator visited the Division of Education in Petchaburi and the *Success For Life Thailand* Center in Bangkok to locate the study sample.

For the first group (i.e., currently being trained), the investigator collected this data from the 52 teachers and administrators. These individuals had finished the training on *Success For Life Thailand* in October 2006 in their program evaluation meeting in December 2006. For the second group (i.e., previously trained), the investigator contacted the *Success For Life Thailand* center and obtained a list of teachers and administrators who had attended the *Success For Life Thailand* training in the years of 1999 and 2000. Then, the investigator sent consent forms, the introduction letter, and two sets of survey questionnaires to each participant. For the third group (i.e., no knowledge of the *SFLT* curriculum), the investigator cooperated with the same official at the division of education in Petchaburi in selecting a comparable group of educators to the first group in terms of school and teacher characteristics. The official sent the same set of consent forms, introduction letter, and questionnaires to the third group.

Translation of the Questionnaires

Both the *Teachers Beliefs and Practices Survey: 3-5 Year Olds* (Burts et al., 2000) and the *Learner-Centered Education: the Assessment of Learner-Centered (ALCP) for K-3* (McCombs, 2001) were created for research with American educators. The researcher was unable to find a Thai version of the two questionnaires. The investigator contacted the original authors and received permission to translate them into Thai from English and to use them for the present study. Two professionals who are fluent in both English and Thai translated the instruments. One was a Thai professor in English language. Another one has two master's

degrees from the United States. The investigator initially translated the ALCP into Thai and the English professor validated it. The English professor translated the DAP questionnaire into Thai. The investigator and the second professional validated the translation. All translation disagreements were resolved.

Data Screening Strategies

The first issue for data screening was the missing data. For the DAP Belief scale, 17 out of the total 29 respondents missed 61 items (1.5%), for the DAP Practice scale, 14 of them missed 35 items (1.2%). On the ALCP, 5 out of the total 89 teachers missed 6 items on the first 44 items on the survey (.2%). Even though the ratios for the missing data on both the questionnaires were low, as the current sample size was small, it was decided to use the mean replacement strategy to handle the missing data (Schumacker & Lomax, 2004), that is, the missing values on the survey items were replaced with the corresponding factor means. However, if the missing data exceeded more than four items on a questionnaire, there was a possibility that the respondent did not answer the survey as seriously as desired. Therefore, the entire record was excluded for the present study. Based on this rule, 5 teachers missed 5 or more items on the DAP Practice scale and were not included. In addition, 4 teachers selected “3” for all of the items on the DAP and/or ALCP questionnaires, they were deleted. Furthermore, 4 respondents in two pairs provided identical answers to the survey items on the DAP questionnaire and six pairs did so on the ALCP questionnaire. One pair responded to the survey items identically on both the DAP and ALCP questionnaires. These 9 pairs were removed in data analysis.

A second data issue was the outlier. Data normal distribution is often critical in inferential statistics (Maxwell & Delaney, 2004). Outliers could significantly make the data non-

normally distributed (Schumacker & Lomax, 2004). The univariate outliers were detected and removed by using the criterion of the standardized factor means beyond 2.5 (Hair, Black, Babin, Anderson, & Tatham, 2006). Under this strategy, eight records on the DAP questionnaire and three cases on the ALCP questionnaire were removed, which left 78, 75, and 75 cases for the DAP Belief scale, the DAP Practice scale, and the ALCP scale, respectively. These cases were subject to the normality checking on each factor on the two questionnaires by using the strategies suggested by Hair et al. Table 1 shows all of the factor scores are less than the cutting-off point ± 1.96 ($p > .05$), indicating they are normally distributed after the outliers were removed. For the multiple regression analysis, the multivariate outliers were detected by the Mahalanobis D^2 measure. Hair et al. suggested using conservative levels of significance for small samples (e.g., .005 or .001). For the present study, the .001 level was used in identifying the outliers for all of the predictions.

Table 1
Skewness and Kurtosis and the Z scores

Factors	Skewness	Kurtosis	Z-score for Skewness	Z-score for Kurtosis
DAP belief	-.13	-.75	-.46	-1.36
DIP belief	-.37	.17	-1.33	.31
FCI	.07	-.85	.27	-1.53
DAP practice	.03	-.42	.12	-.74
DIP practice	.16	-.47	.56	-.84
Child-centered belief	-.35	-.45	-1.25	-.80
Non child-center belief	-.16	-.21	-.58	-.36
Interpersonal relations	.01	-.21	.05	-.37
Motivating students	-.08	-.57	-.29	-1.01
Facilitating strategies	-.35	-.21	-1.25	-.37

Note: $N = 78$ for the first three factors and 75 for the other factors.

Data Analysis Strategies

To answer the 7 research questions, descriptive statistics, ANOVAs, and multiple regression were used. The first 3 research questions were answered with the descriptive statistics of means and standard deviations in this normalized sample. Research questions 4 and 5 were examined through one-way ANOVA among the 3 groups of the teachers. If there was an omnibus significance, Turkey's HSD was used for post-hoc testing as it allows testing of all of the possible pairwise comparisons while maintaining the alpha level (Maxwell & Delaney, 2004). Questions 6 and 7 were explored by using multiple regression. For the multiple regression, the criterion variables were the six factor scores (i.e., three on DAP Belief scale, two

on the DAP Practice Scale, and the composite one on the ALCP scale as explained in Chapter IV on the results in Table 5). Initially, the investigator planned to use 12 teacher's demographic variables as the predictors. However, some of these variables were either inapplicable to all the participants (e.g., certification type, teaching years in special education) or too homogeneous (e.g., ethnicity, education major) in this sample. In addition, the sample size was not large enough to meet the recommended 1:15 ratio (Hair et al., 2006). Accordingly, only the four variables applicable to all of the participants (i.e., the group membership based on the familiarity to the *SFLT* curriculum, educational level, teaching experience, and total number of students in the classroom) were selected as the predictors for the multiple regression analyses. Dummy coding was used for the categorical predictors.

CHAPTER IV

RESULTS

Examinations on the Psychometric Properties

Prior to data analyses, the internal consistency reliability coefficients in Cronbach alpha were calculated. Devillis (1991) stated alpha coefficients between .60 and .70 are acceptable although undesirable for exploratory studies. In addition to examining the internal consistency reliability, convergent and discriminant validity evidence as demonstrated by the inter-factor correlations among the scale factors were checked as well. These indices should provide some reliability and validity evidence on the applicability of the two instruments to the Thai culture. Tables 2 and 3 list the alpha coefficients, and Tables 4 and 5 display the inter-factor correlations for the two questionnaires in the present sample.

Table 2 shows the DAP Belief scale has either satisfactory or acceptable alpha coefficients. The internal consistency reliability coefficients are relatively low for the subscales of DAP Practice scale. It was lowest for the DIP Practice subscale; consequently all results of the DIP Practice subscale must be interpreted cautiously.

Table 2
Alpha Coefficients on the Teachers Beliefs and Practices Survey

Subscales	Number of items	Sample size	Cronbach α
DAP beliefs	16	78	.83
DIP beliefs	15	78	.79
FCI	9	78	.73
DAP practices	18	75	.66
DIP practices	12	75	.48

Table 3 indicates the Cronbach alphas are acceptable on all of the factors on the ALCP except for the dimension of creating positive interpersonal relationships with students. However, these reliability coefficients are notably lower than those reported with an American sample (McCombs, 2000), with an average of .20 less.

Table 3
Alpha Coefficients on the ALCP

Subscales	Number of items	Sample size	Cronbach α
Child-centered beliefs	14	89	.70
Non child-center beliefs	8	89	.63
Interpersonal relations	6	89	.52
Motivating students	8	88	.71
Facilitating strategies	8	88	.70

Table 4 shows that the inter-factor correlations on the DAP questionnaire among the DAP beliefs; FCI; and the DAP practices are all significantly correlated in the desired positive direction. The magnitudes of the correlations range from .39 to .72, that is, practically from low to large (Cohen, 1988). The largest correlation is between the DAP beliefs and the FCI factor. The correlation coefficient of .72 indicates these two factors share about 52% of the common variance. In other words, almost half of the variances are explained separately by the two factors. This fact supports they are separate factors, addressing different domains of the DAP beliefs. The DIP beliefs and the DIP practices are also positively correlated as desired at .29, nearly at a moderate degree (Cohen). Interestingly, the DAP practice and the DIP practice are unexpectedly correlated in the positive direction at .27. In addition, other supposedly negative correlations among the positive dimensions of the DAP and the negative dimensions of the DIP are not found. Therefore, it is unreasonable to reversely recode the DIP Belief and the DIP Practice to derive a total DAP score as in Kim (2005). The results in Table 4 suggest that the different dimensions of the teachers' DAP beliefs and practices should be studied separately.

Table 4

Intercorrelations Among the Subscales on the Teachers Beliefs and Practices Survey

Subscales	DAP belief	DIP belief	FCI	DAP Practice	DIP practice
DAP beliefs	-				
DIP beliefs	-.033	-			
FCI	.72***	-.03	-		
DAP practice	.44***	-.02	.39***	-	
DIP practice	-.15	.29*	-.06	.27*	-

Note: * $p < .05$, *** $p < .001$; $N = 78$ for the three inter-factor correlations on the DAP Belief scale and $N = 72$ for other correlations.

Table 5 shows the four positive factors on the ALCP are correlated with one another in the desired positive direction. The moderate correlations in the range of .46 and .63 (Cohen, 1988) indicate these dimension tap on separate aspects of the child-centered beliefs although they share some common variance ranging from 21% to 40%. Surprisingly, the non-child-centered belief also significantly correlates with the factors of child-centered belief ($r = .41$) and creating positive interpersonal relationships ($r = .25$). Since all of the five factors are generally correlated in the positive direction, they are aggregated into a composite score for the regression analysis.

In summary, Tables 2-5 indicate the two questionnaires demonstrate some reliability and validity evidence for the current sample, especially on the positive dimensions of the DAP and the ALCP. However, the negative dimensions on the two questionnaires have weak reliability and validity evidence among the Thai teachers in this study.

Table 5
Intercorrelations Among the Subscales on the ALCP

Subscales	LC	NLC	PIR	MSL	TLF
Learner-centered belief (LC)	-				
Non learner-center belief (NLC)	.41***	-			
Positive interpersonal relationships (PIR)	.50***	.25*	-		
Motivation support for learning (MSL)	.60***	.03	.46***	-	
Thinking and learning facilitation (TLF)	.51***	.17	.49***	.63***	-

*Note: a. * $p < .05$, *** $p < .001$; $N = 75$.*

The Current Status of the Thai Educators on DAP and Child-Centered Learning

Research questions one and two explore the extents to which the Thai early childhood teachers hold on the DAP beliefs and their perceptions of the classroom practices related to the DAP tenets. Teachers' perceptions of the relative importance of the six different sources influencing child development and education were examined. Table 6 shows the frequency distributions from most influence to least importance for the six sources in the entire sample. As a whole, the Thai teachers perceived school system policy was most influential, followed by parents, principal/director, teacher self, state regulations, and other teachers. The order of the relative importance for the six sources is generally consistent across the three groups of participants as indicated by the insignificant χ^2 for the distribution patterns in Table 6. The only group difference found is on the importance of principal/director. However, as the p value approaches .05 and many cross-tabulation cells had counts less than the 5, the group difference on the perception of the importance of principal/director in the three groups should be cautiously interpreted and require further examination in the future with large sample sizes.

Table 6
Importance of the Six Sources and the Group Differences

Sources	<i>Importance</i>						<i>M(SD)</i>	χ^2
	<i>I^a</i>	2	3	4	5	6		
Parents	12	15	19	22	1	5	3.00(1.35)	$\chi^2(10) = 13.12, p > .05$
School system policy	25	22	15	8	2	0	2.17(1.11)	$\chi^2(8) = 14.74, p > .05$
Principal/director	9	15	21	16	8	2	3.07(1.29)	$\chi^2(10) = 18.74, p = .04$
Teacher (yourself)	13	13	12	19	13	1	3.13(1.43)	$\chi^2(10) = 9.89, p > .05$
State regulations	16	6	2	3	26	17	3.97(1.96)	$\chi^2(10) = 16.51, p > .05$
Other teachers	0	2	3	1	20	44	5.44(.94)	$\chi^2(8) = 8.18, p > .05$

Note: a. 1 = Most Influence, 6 = Least Influence

With regard to the specific dimensions of the DAP beliefs, Table 7 shows, as a whole, this sample of the Thai educators strongly endorsed on the DAP beliefs ($M = 4.24$) and the value of family, culture, and inclusion ($M = 4.20$). Interestingly, they also believed that the traditional teacher-centered direct teaching was important ($M = 3.35$). Table 7 also indicates the teachers rated themselves on practicing the DAP nearly regularly in their early childhood classrooms ($M = 3.77$), and that they pretended DAP approaches more frequently than DIP practices ($M = 3.57$). Nevertheless, the DIP practices were still prevalent in the Thai classrooms in this sample, at least once a week. Overall, Table 7 shows that the Thai teachers have more DAP beliefs and practices than the DIP beliefs and practices. But the DIP beliefs and practices were not exceptions. It seems they are integrated parts of these teachers' belief systems and their daily educational practices.

Table 7
Descriptive Statistics on the DAP Factors

Subscales	Mean	<i>SD</i>
DAP belief (<i>N</i> = 78)	4.24	.39
DIP belief (<i>N</i> = 78)	3.35	.49
FCI (<i>N</i> = 78)	4.20	.42
DAP practice (<i>N</i> = 75)	3.77	.32
DIP practice (<i>N</i> = 75)	3.57	.35

Research question three examined the extent to which the Thai teachers agree upon child-centered learning. For the five domains of the child-centered beliefs, Table 8 shows the Thai teachers strongly subscribe to the learned-child beliefs ($M = 3.45$), followed by providing motivational support for learning ($M = 3.40$), facilitating students' thinking and learning ($M = 3.18$), and creating positive interpersonal relationships ($M = 2.97$). Interestingly, the teachers also agree with the non learner-centered beliefs ($M = 3.02$) with a slightly higher variation ($SD = .44$) than the standard deviations on other positive domains. Similar to the results found on the DAP survey, the Thai teachers, as a group, held stronger beliefs on learner-centered tenets than on non learner-centered philosophies. But the non learner-centered beliefs were still popular in the Thai educators. In considering the earlier finding of the positive correlation between learner-centered beliefs and non learner-centered beliefs, these results may suggest that the Thai teachers do not necessarily perceive non learner-centered beliefs as inappropriate.

Table 8
Descriptive Statistics on the ALCP Factors (N = 88)

Subscales	Mean	SD
Learner-centered beliefs	3.45	.30
Non Learner-centered beliefs	3.02	.44
Creating positive interpersonal relationships	2.97	.39
Providing motivation support for learning	3.40	.34
Facilitating thinking and learning	3.18	.37

The Group Differences on the DAP and Child-Centered Learning

Question four investigates whether there are any differences among the three groups of the Thai early childhood teachers based on their different degrees of familiarity to the *Success For Life Thailand* curriculum. One-way ANOVA was used to examine the differences among these three groups. It is necessary to check the three assumptions for the one-way ANOVA first: (a) independent and random samples from the defined populations, (b) normal distribution of the dependent variable, and (c) homogeneity of variance (Hinkle, Wiersma, & Jurs, 2003). Although the first assumption was violated as the available populations for the currently and previously trained teachers were very limited, the effect of the violation to the first assumption on the Type I error rate is minimal (Glass, Peckham, & Sanders, 1972). For the second assumption, as shown in Table 1, all variables were normally distributed. The assumption of homogeneity of variance was also met in all of the one-way ANOVAs on the ten factors on the DAP and ALCP surveys. The means and standard deviations for the three groups on the five factors on the DAP questionnaire are present in Table 9. The table also shows the ANOVA and the post-hoc test

results. There are significant group differences on the DAP Beliefs and DIP Practices. More specifically, the previously trained group has stronger DAP beliefs and fewer DIP practices than the currently trained group. The group differences on the DIP Beliefs and DAP Practices are also approaching the .05 level significance. The post-hoc tests show the previously trained group holds fewer DIP beliefs than the currently trained group at the .06 level. The previously trained group also reports significantly more DAP activities in their classrooms than the comparison group. There are no significant differences between the currently trained group and its comparison group on all of the five DAP dimensions. All of the three groups similarly rated the value of the family, culture, and inclusions high.

Table 9
Descriptive Statistics of the DAP Factors and the Group Differences

Subscales	Currently trained (G1) (<i>n</i> = 28)	Previously trained (G2) (<i>n</i> = 16)	Comparison group (G3) (<i>n</i> = 34)	ANOVA Results	Significant post-hoc test
DAP belief	4.13(.47) ^a	4.44(.31)	4.23(.31)	$F(2, 75) = 3.62^*$	G1 < G2
DIP belief	3.44(.39)	3.09(.62)	3.39(.47)	$F(2, 75) = 2.93$ ($p = .06$)	G1 > G2 ($p = .06$)
FCI	4.10(.49)	4.24(.29)	4.27(.35)	$F(2, 75) = 1.45$	
DAP practice	3.78(.31)	3.93(.25)	3.69(.34)	$F(2, 75) = 2.94$ ($p = .06$)	G2 > G3
DIP practice	3.72(.29)	3.43(.39)	3.52(.34)	$F(2, 75) = 4.24^*$	G1 > G2

Note: * $p < .05$

a. Standard deviations in parentheses.

Table 10 lists the means and standard deviations for the three groups, the ANOVA results among the three groups, and the post-hoc test results. There are neither omnibus group differences nor individual group difference on all of the five domains of child-centered learning. All of the teachers in the three groups have similar perceptions on different domains of child-centered beliefs, non child-centered beliefs, and the related classroom practices.

Table 10
Descriptive Statistics of the ALCP Factors and the Group Differences

Subscales	Currently trained (G1) (<i>n</i> = 21)	Previously trained (G2) (<i>n</i> = 15)	Comparison group (G3) (<i>n</i> = 39)	ANOVA Results	Significant post-hoc test
Child-centered belief	3.36(.39) ^a	3.53(.21)	3.47(.26)	$F(2, 72) = 1.79$	None
Non child-center belief	3.04(.34)	2.80(.53)	3.10(.43)	$F(2, 72) = 2.60$	None
Interpersonal relations	2.87(.47)	2.99(.40)	3.01(.33)	$F(2, 72) = .87$	None
Motivating students	3.40(.38)	3.49(.35)	3.36(.32)	$F(2, 72) = .75$	None
Facilitating learning	3.09(.39)	3.28(.43)	3.20(.34)	$F(2, 72) = 1.11$	None

Note: a. Standard deviations in parentheses.

Predictions on the DAP and Child-Centered Learning

In addition to examining on the group differences among the three groups with different degrees of acquaintance to the *SFLT* curriculum, the present study also predicted the variances on the different domains of the DAP and ALCP questionnaires with three additional variables besides the group membership. Among these four predictors, educational level and group membership are dummy-coded as shown in Table 11, whereas the teaching experience and number of students in the classroom are treated as the continuous variable. There are four critical assumptions in multiple regression analysis: (a) linearity of the relationship between predictor and criterion variables, (b) constant variance of the error terms (i.e., homoscedasticity), (c) independence of the error term, and (d) normality of the error term distribution (Hair et al., 2006). Hair et al. stated “Plotting the residual versus the independent or predicted variables is a basic method of identifying assumption violations for the overall relationship” (p. 205). These four assumptions are checked by using the plots of the studentized residual versus the predicted dependent value for each of the regression analyses.

For the DAP beliefs, one case (i.e., case 17 in the previously training group) was found being an influential outlier and was removed. There were no further outliers after this case was excluded. The residual plot is presented in Appendix A. It shows that the linearity assumption is met, that is, the residuals are both above and below the mean across the range of the predicted values. The assumption of equal variance of the residuals is also basically met from the visual inspection of the residual plot as the error terms are primarily randomly distributed. The error terms in the plot also seem to be independent. The error term distribution does not show a violation of the independence as indicated by any consistent patterns. The normality of the error term distribution is often checked through the use of normal probability plots (Hair et al., 2006).

When the residual line closely follows the straight diagonal line, the error terms are considered to be normally distributed (Hair et al., 2006). The normal probability plot for the DAP belief is also displayed in Appendix A after the residual plot and demonstrates the normality assumption of the error terms is met. In summary, all of the four major assumptions for multiple regression on the prediction of the DAP belief with the four predictors are met after the outlier was excluded.

Table 11 shows that the prediction of the DAP beliefs with the four predictor variables is insignificant, the overall R^2 for the prediction is trivial, and none of the four predictors are significant.

Similarly, the residual plot and the normal probability plot are examined for the regression of the DIP beliefs after the same outlier was excluded. They show the assumptions are primarily met although the normal probability plot pattern seems to indicate the DIP belief scores are in a platykurtic normal distribution. Table 11 shows the prediction for the DIP belief is insignificant, the multiple R^2 is nominal, and none of the predictors are salient.

For the prediction of family, culture, and inclusion (FCI), the same participant was found as an outlier and excluded in the regression analysis. The residual plot and the normal probability plot indicate the assumptions are primarily not met. Both nonnormality and heteroscedascity (i.e., the dependent variable exhibits unequal level of variance across the range of predictor variables) seem to appear. The data seem to be in peaked distribution. However, since the prediction is far away from the .05 level significance as shown in Table 11, data transformation or other remedy measures are not performed to improve the predictions as the results are unlikely to change.

There were no outliers in the prediction for the DAP Practices. Heteroscedasticity seems to appear in the residual plot with a diamond patter as shown in Appendix A. Once again, no

remedies are performed to improve the data distribution due to the low power of the prediction. The four predictors together do not predict the variability of teachers' DAP practices. The multiple R^2 is .06, practically meaningful with a small effect size (Cohen, 1988). But if it is adjusted for the errors (e.g., measurement or model specification errors), the adjusted R^2 is virtually zero ($R^2_{adj} = -.008$).

For the prediction of the DIP practices, there were no outliers detected. Inspections of the residual plot and the normal probability plot signal the presence of heteroscedasticity with less variation in left tail and in the range between zero and one positive standard deviation. The error terms are not normally distributed either. Data transformation could be applied to improve the data normal distribution. However, as the prediction is not significant as in other domains of the DAP, the data transformation is not performed. The data transformation is less likely to noticeably change the regression results. Table 11 shows this insignificant prediction has a practically small multiple R^2 (i.e., .07). None of the four predictors are important.

For the prediction of the composite learned-center belief score, no outliers were detected. The assumptions for the regression analysis are primarily met with slight violations to both the homoscedasticity and normality as shown in Appendix A. Similar to the predictions for the DAP factors, the four variables do not significantly predict the variation of the learner-centered score. The multiple R^2 was practically small (i.e., $R^2 = .07$) and the adjusted R^2 was virtually zero ($R^2_{adj} = -.008$). No individual predictors are found to be significant.

In summary, all of the predictions on the DAP subscores and the ALCP composite score by using the four variables are not significant. The overall R^2 are trivial, and the adjusted R^2 are either virtually zero or meaningless less than zero due to too much error. No individual predictors demonstrate significance.

Table 11
Regression Results for Predicting Variations on DAP

<i>Variables/Statistics</i>	DAP beliefs		DIP beliefs		FCI		DAP practice		DIP practice	
	β	t	β	t	β	t	β	t	β	t
Group										
1 = currently trained										
2 = previously trained	.04	.27	-.06	-.42	.10	.75	-.17	-1.29	-.24	-1.85
3 = comparison group										
Educational level ^a										
4 = associate degree										
5 = bachelor										
6 = master	.04	.32	-.10	-.75	-.05	-.35	.14	1.02	-.06	-.45
7 = master plus										
Teaching experience in years	-.01	-.07	-.03	-.19	-.04	-.26	.04	.27	-.07	.51
Number of students in the classroom	.02	.13	-.09	-.66	-.04	-.28	-.09	-.66	-.08	.60
$R^2(R^2_{adj})$.003(-.066)		.02(-.051)		.02(-.053)		.06(-.008)		.07(-.008)	
N	63		63		63		61		61	
F	$F(4, 48) = .042$		$F(4, 58) = .25$		$F(4, 58) = .22$		$F(4, 56) = .89$		$F(4, 56) = .99$	

Note: a = There are no cases for educational levels of 1(certificate), 2 (high school diploma), and 3 (child development associate).

Table 12
Regression Results for Predicting Variations on the ALCP

<i>Variables/Statistics</i>	Total Learner-centered score	
	β	t
Group		
1 = currently trained		
2 = previously trained	.05	.35
3 = comparison group		
Educational level ^a		
4 = associate degree		
5 = bachelor		
6 = master	-.10	-.75
7 = master plus		
Teaching experience in years	.02	.12
Number of students in the classroom	-.23	-1.64
$R^2 (R^2_{adj})$.07(-.008)	
N	56	
F	$F(4, 55) = .89$	

Note: a. There are no cases for educational levels of 1(certificate), 2 (high school diploma), and 3 (child development associate).

CHAPTER V

DISCUSSION

Summary and Discussion

Early childhood education in Thailand needs to be improved (Chengkoon, 2001).

Learner-centered teaching and the developmentally appropriate practice are quality approaches for teaching young children and are consistent with the government's advocacy (Ministry of Foreign Affairs, Thailand, 2005; National Education Act, 1999). However, learner-centered teaching is not a popular practice in Thailand and the Thai early childhood teachers may lack sufficient knowledge and skills to implement learner-centered education. For instance, the Office of the National Education Commission of Thailand (2003) investigated Thailand's education reform through the learner-centered approach. The longitudinal evaluative research started with 600,000 teachers in Thailand since 2000. The findings stated that (a) 28% of teachers (172,200) applied the learner-centered teaching on the levels of good and excellent, (b) 31.4% of teachers (180,800) applied learner-centered teaching on the level of slightly below the average, and (c) 38.7% of teachers (222,900) used the learner-centered teaching at the level of average and tended to improve their teaching on the learner-centered teaching.

Thai teachers need model programs and systematic training to change and upgrade their knowledge and skill sets toward the learner-centered approach. *Success For Life Thailand* is such as a program consistent with philosophies of the learner-centered education and the NAEYC's developmentally appropriate practices guidelines, and meets the standards of the Ministry of Education in Thailand for the educational needs for the Thai young children (Morrison, 2005). Teachers and principals who attend the *Success For Life Thailand* training workshops may have gained knowledge and skills in learner-center teaching and the developmentally appropriate

practices. The primary objective of this study is to indirectly evaluate the effectiveness of the SFLT training through an investigation into the impacts of the training on teachers' learner-centered beliefs and practices. The three purposes of the present study are to (a) describe the current status of the child-centered beliefs and practices in Thai early childhood educators, (b) examine if there are any differences among three groups of early childhood teachers with different degrees of familiarity to the SFLT program, and (c) explore if there are any other variables in addition to the SFLT training influencing the child-centered beliefs and practices. Seven research questions guided the present study.

The first two research questions examine the extent to which the Thai early childhood teachers currently possess the DAP beliefs and rate themselves on the applications of these DAP principles to their classroom practices. Findings from the present study indicated that (a) the Thai teachers have strong DAP beliefs ($M = 4.24$), (b) they reported DAP practices occurring in the classrooms regularly ($M = 3.77$), (c) their DAP beliefs were stronger than their DAP practices (4.24 vs. 3.77), and (d) the DIP beliefs and practices had the lowest scores ($M_s = 3.35$ and 3.57 , respectively). The scores on the DAP Belief, the DAP Practice, and DIP Belief scales in this sample are comparable to the corresponding values of 4.2, 3.8, and 3.4 in Kim's (2005) study. However, the Thai teachers seemed to have a higher score on the DIP Practice than American counterparts in Kim's study (i.e., 3.57 vs. 2.5). These results were also consistent with Butkatunyoo's (1999) findings with a Thai sample. Butkatunyoo reported that teachers and administrators understood the DAP practices only moderate well. Many teachers understood little on how to engage students into active learning in their classrooms. Twenty-eight percent of administrators showed understanding about relevant appropriate practices to different ages of children, whereas 72% did not understand about relevant appropriate practices to different ages

of children. Overall, these results seem to indicate the Thai teachers retain some beliefs in and still often use the DIP activities in their classrooms. They do this while they highly value the DAP beliefs.

The third research question focuses on the extent to which the Thai early childhood educators support the learner-centered teaching and learning on the ALCP. Findings from this study showed that Thai teachers strong hold learner-centered beliefs ($M = 3.45$), and for providing motivational support for learning ($M = 3.40$), facilitating students' thinking and learning ($M = 3.18$), the non learner-centered beliefs ($M = 3.02$), and then creating positive interpersonal relationships ($M = 2.97$). These results were somewhat different from the findings in McCombs' (2004) in a sample of 122 American K-3 teachers. The mean scores for the corresponding five factors were 3.16, 2.98, 3.32, 2.66, and 3.26 in McCombs'. In other words, the sequence in McCombs' was facilitating thinking and learning, creating positive interpersonal relationships, learner-centered beliefs, providing motivation support for learning, and non learner-centered beliefs. Whereas it may be inappropriate to interpret the mathematical differences on the five factors in the two samples, it is meaningful to notice two different patterns in these two studies: (a) the dimension of creating positive teacher-student relationships was highly valued in the American culture, but it had the lowest rating score in the Thai sample; and (b) the Thai teaches seemed to have stronger non learner-centered beliefs than the American counterparts ($M_s = 3.02$ vs. 2.66). These differences in the two cultures may suggest: (a) the individualism-oriented positive teacher-student relationships was not highly endorsed in the collectivistic Thai culture, and (b) the Thai teachers do not necessarily perceive the non learner-centered beliefs as being inappropriate.

The fourth question investigates if there were any differences among three groups of early childhood educators on the DAP beliefs and practices. The finding indicated that (a) the currently trained group did not differ from its comparison group, and (b) the previously trained group generally showed higher DAP beliefs and practices than the other two groups. The immediate effect of the SLFT curriculum was not found. The currently trained teachers did not demonstrate superiority to the comparison counterparts on DAP belief and practices. One possibility is that teachers need time to digest the knowledge and skills learned from the DAP and child-centered related SLFT training, to reflect on the theories, and to apply these principles to their daily teaching practices. It is possible that the superiority of the previous trained group is associated with a high degree of the familiarity with the SLFT curriculum. However, the more desirable outcomes for this group may not be solely attributed to its longer experience with the SFLT curriculum. Other confounding variables may impact the group differences. For instance, this group of teachers residing in the Bangkok area is usually associated with higher school quality and better educational resources than the other two groups in the relatively disadvantaged Petchaburi province. Future studies need to explore this question with more available SLFT-trained teachers by controlling the covariates.

The fifth research question examined the group differences on the learner-centered teaching. Findings from this study indicated all of the three groups did not differ on all of the five domains of the learner-centered teaching and learning on the ALCP at the .05 level of significance. The previously trained group scored lower than the comparison group on non learner-centered beliefs at the .07 level. Again, this desirable group difference should be interpreted cautiously as the previously trained group usually associates with other advantages

over the comparison group as well, in addition to the higher familiarity with the SLFT curriculum.

The sixth and seventh questions explored the possible salient factors influencing the Thai early childhood educators' beliefs and activities on the DAP and the learner-centered teaching. Findings from this study showed: (a) the four predictor variables (i.e., group membership, teacher's educational level, teaching experience in years, and total number students in the classroom) as a group did not significantly predict the variability on the different dimensions of the DAP beliefs and practices, and the total learner-centered score on the ALCP; (b) the values of the multiple R^2 were usually trivial or small and the shrunk multiple R^2 adjusted for different types of potential errors were virtually zero or meaningless; and (c) no individual variable of the four predictors was found to be significant. There are no other studies using the same sets of predictor and criterion variables for the regression analyses for the factors on the DAP and ALCP questionnaires, either in the American or Thai samples.

Kim (2005) used seven predictors (i.e., permission for observation, education level, ECE background, years of teaching, number of children, percentage of free lunch, and locus of control) predicting the composite scores of DAP beliefs and DAP activities and reported significant predictions with the values of the multiple R^2 in .131 and .131. The values of the adjusted multiple R^2 were not reported.

The present study did not derive the combined DAP belief and DAP activity scores by reservedly coding the DIP belief or the DIP activities as in Kim's due to the significantly positive correlations among these "negative" factors and the positive factors on the DAP questionnaire, which was also presented in Kim's sample. While it may be possible that these four selected predictors do not predict the variances of the DAP and learner-centered factors in the Thai

culture, other explanations cannot be eliminated. For instance, the two translated questionnaires on the DAP and learner-centered teaching in Thai may not be as appropriate as in the American culture as demonstrated in the reliability and validity challenges in the present sample. The collected data may not be in the high quality as desired as demonstrated in the low Cronbach alphas on some of the factors and the large differences between the multiple R^2 and the adjusted multiple R^2 . In addition, the present sample was not a random one from a large population for the trained groups due to the limited history and trainees of the SFLT curriculum. This fact limits the selection and variability of the predictor variables. Future studies need to confirm the insignificant predictions and possibly extend to including other teacher, student, classroom, or school variables which may make a difference on the DAP or learner-centered teaching.

Contributions and Limitations

Although the Thai government has strongly advocated the learner-centered education recently, there have been limited empirical data on the current status of the Thai early childhood educators' learner-centered beliefs and practices and the possible correlates. This study contributes to the field with empirical data describing different dimensions of the DAP and learner-centered beliefs and classroom practices in three types of early childhood teachers. Second, this study indirectly evaluates the effectiveness of the SFLT training program. Although the immediate training effect was not found and further studies need to be conducted to make definite conclusions, it seems that the trained teachers with more experiences with the SFLT program tend to have more DAP beliefs and less DIP activities in their classrooms. Third, if accurate, the findings of the insignificant regression analyses suggest future studies may need to include other variables to predict the variability on learner-centered teaching and learning in Thai teachers. Last, the reliability and construct validity challenges on the translated

questionnaires from the two popular instruments in the American culture implies that indigenous Thai measurement instrument on learner-centered beliefs and practices should be developed.

Nevertheless, the findings of the present research should be considered in light of the following research limitations. First, as this study used a special convenience sample, the generalizability of the findings was very limited. Second, the two translated questionnaires showed psychometric challenges as demonstrated (a) in the lower alphas than those reported in the American samples, and (b) the positive correlations among the positive and negative domains on the DAP and ALCP surveys, which should be in the negative direction. The culture validity was not thoroughly checked and remained as an issue. Third, the confirmatory and exploratory factor analyses were not performed to seek the unique factor structures for the two questionnaires in the Thai culture before performing the ANOVA and regression analyses due to the lack of an independent second sample. Fourth, the translation of the questionnaires did not follow the usual forward-and-backward translation process. Fifth, the survey responses were not personally monitored in the data collection process which may lead to some of the low quality or identical answers. Last, but not the least, indications of the DAP/learner-centered beliefs and practices in the present study were based on the paper-reported questionnaires which may possess a threat to the ecological validity (Stone & Litcher-Kelly, 2006). Future studies may need to incorporate direct observations of classroom practices and/or personal interviews with the standardized surveys into the research studies.

Implications

The findings in the present research have both the theoretical and practical implications. The results from this research showed the translated questionnaires from the American culture have challenges for cultural validity, especially on the negative domains of learner-centered

education such as the DIP beliefs and DIP activities on the DAP survey and the non learner-centered beliefs on the ALCP survey. Samahito (2003) observed similar phenomenon and suggested to re-define the “teacher-centered” in the Thai culture differently from the American culture. It seems that localized learner-centered theories and the indigenous measurements suitable to the Thai culture is a high priority for the Thai educational researchers in the future. This inquiry showed statistically significant differences tend to be less likely in the homogenous Thai culture than in the heterogeneous American culture. Educational researchers in Thailand may need to carefully design their studies with more relevant variables in large sample sizes by using mixed methods.

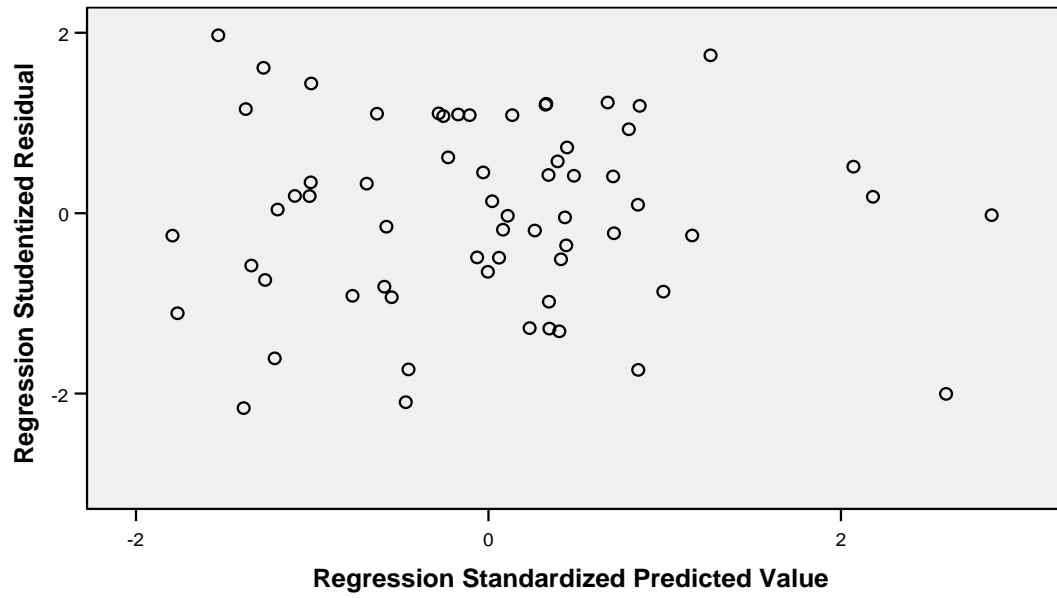
From the practical perspective, this research found the learner-centered beliefs were highly endorsed in the Thai teachers as in the America educators. However, the Thai teachers in the present sample seem to have higher DIP practices and less DAP practices than the American counterparts. These findings were consistent with others claiming the Thai educators have not performed the DAP activities or learner-centered practices in their classrooms at a satisfactory level (Butkatunyoo, 1999). Although some researchers have claimed Thai teachers do not realize the importance of child development and do not support their students to think, analyze and solve problems (e.g., Tungjitsomkit, 2001), the present research seems to suggest learner-centered beliefs need not be a high priority for teacher training. Instead, the Thai educators need help with the necessary skills to implement the DAP practices and reduce the DIP practices in order to realize the national goal of a learner-centered education. This research also has implications to the SFLT training program. The findings of no differences between the currently trained group and its comparison group may indicate that SFLT training needs to devote more time to inservice training and to helping teachers in classrooms.

APPENDIX A

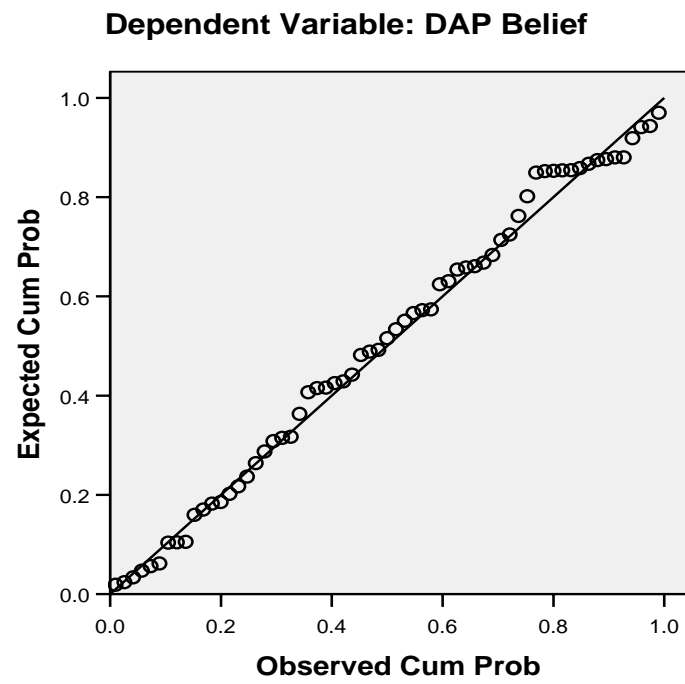
THE RESIDUAL PLOTS AND NORMAL PROBABILITY PLOTS

Scatterplot

Dependent Variable: DAPB

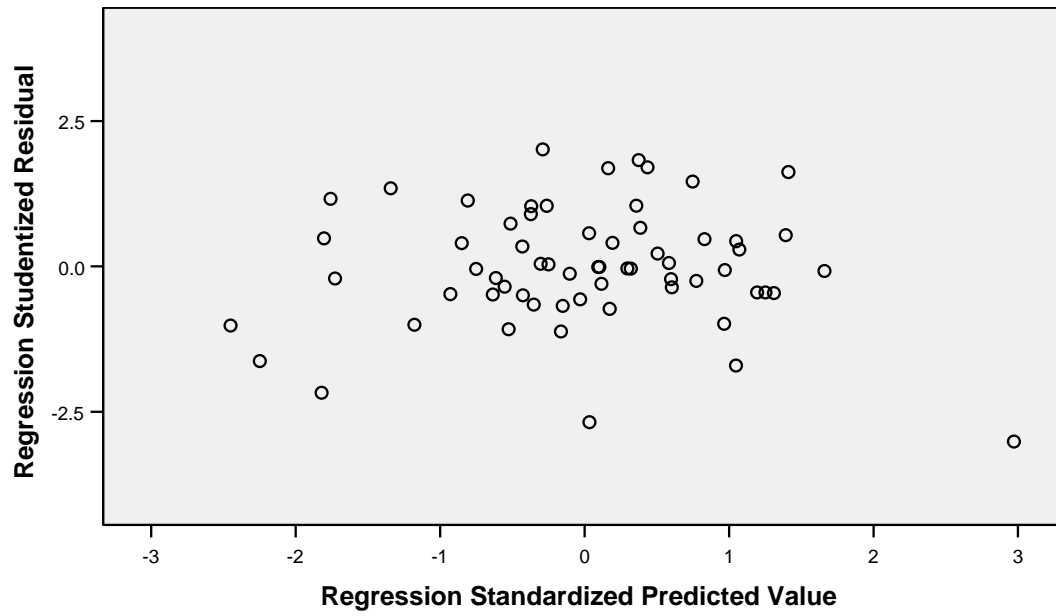


Normal P-P Plot of Regression Standardized Residual

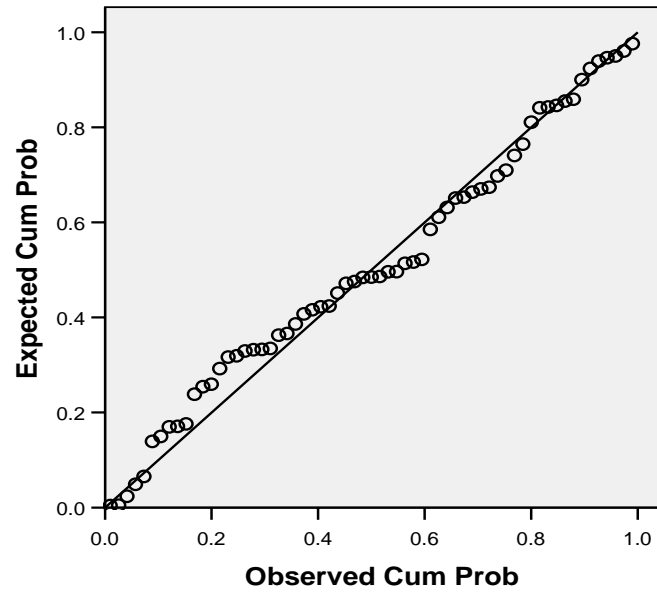


Scatterplot

Dependent Variable: DIP Belief

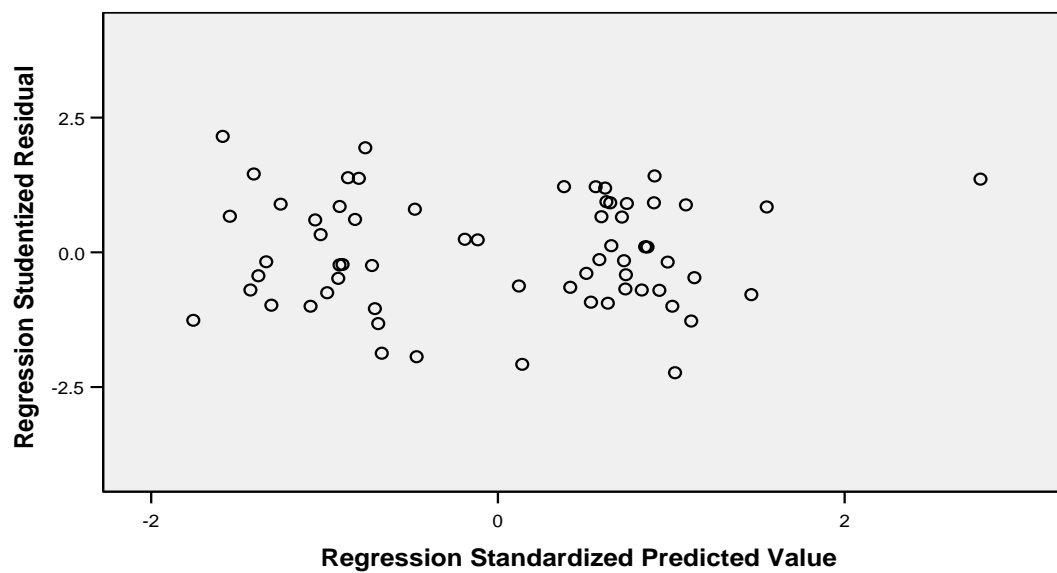


Dependent Variable: DIP Belief

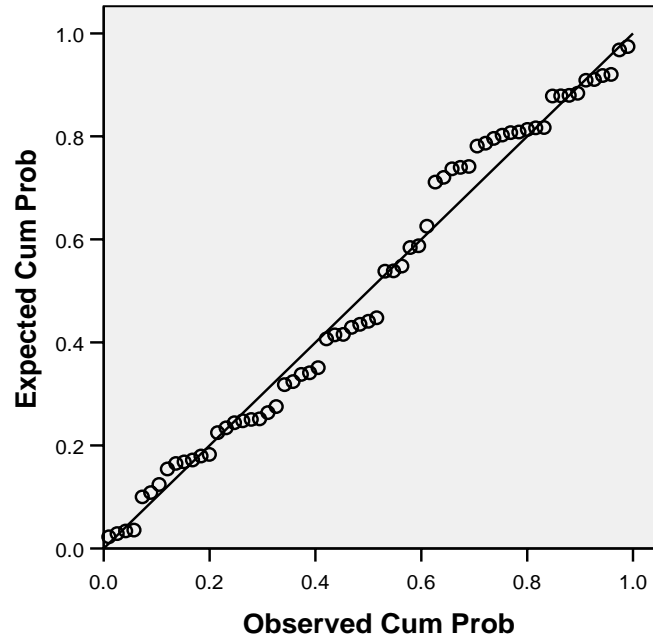


Scatterplot

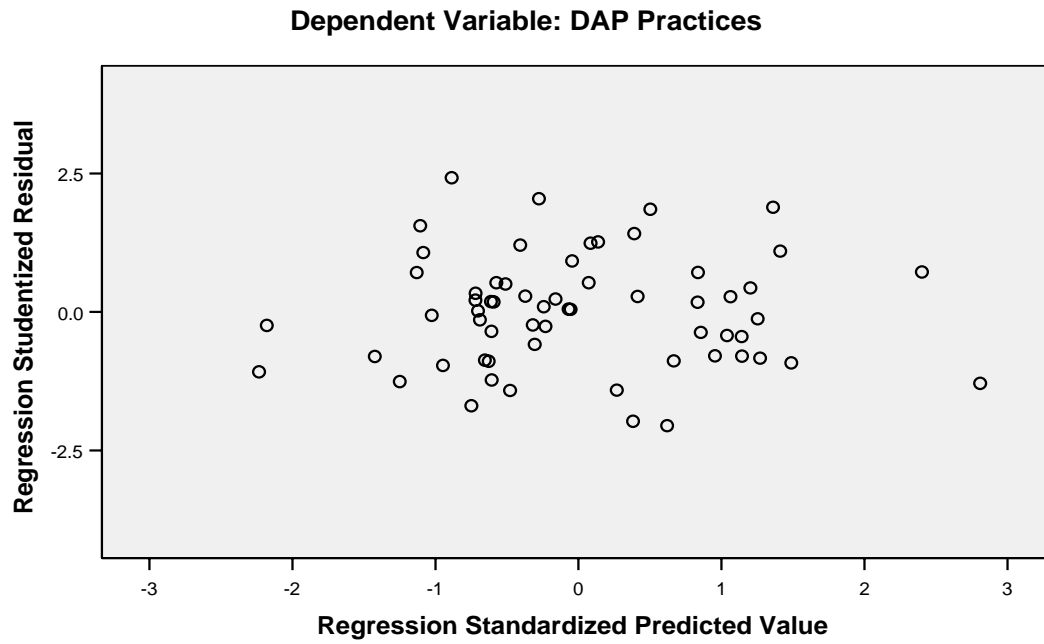
Dependent Variable: Family, Culture, and Inclusion



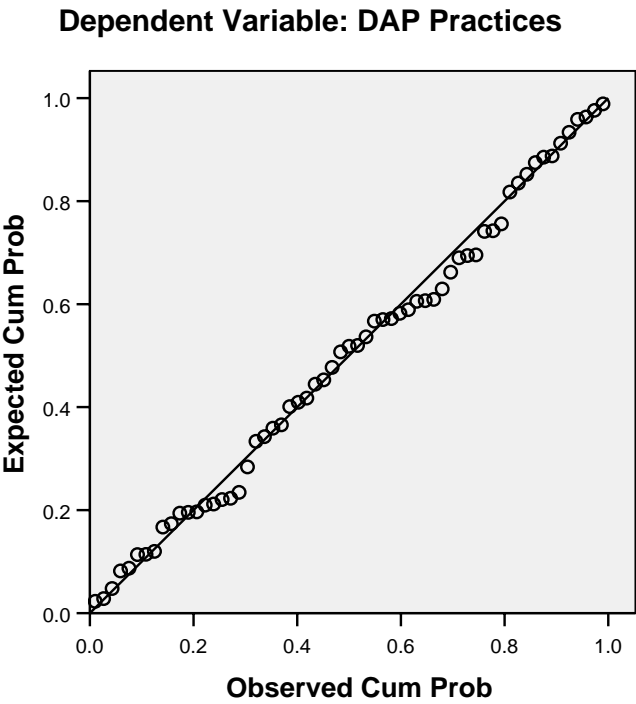
Dependent Variable: Family, Culture, and Inclusion



Scatterplot

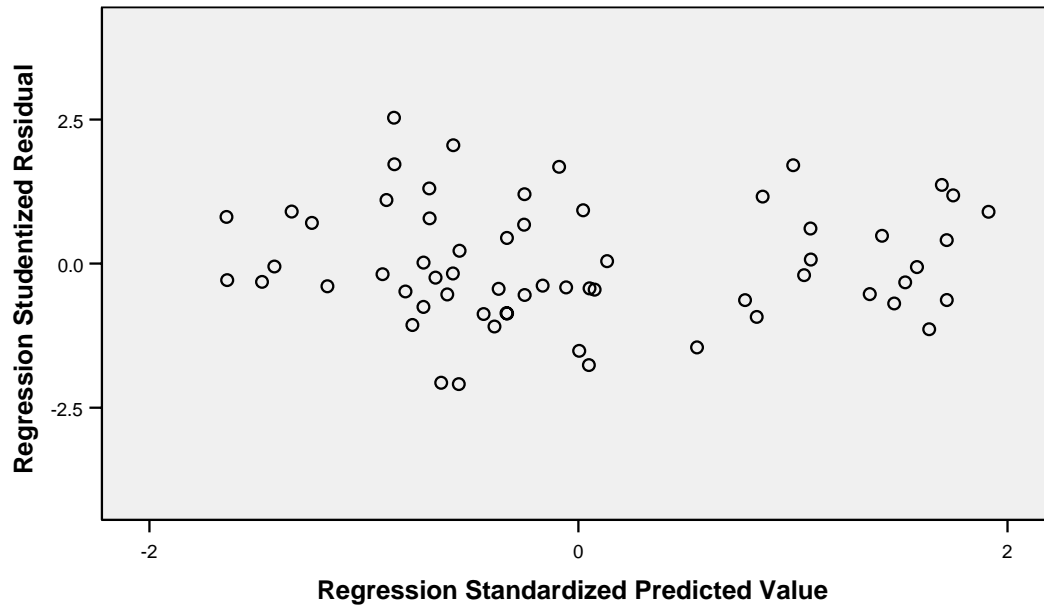


Normal P-P Plot of Regression Standardized Residual

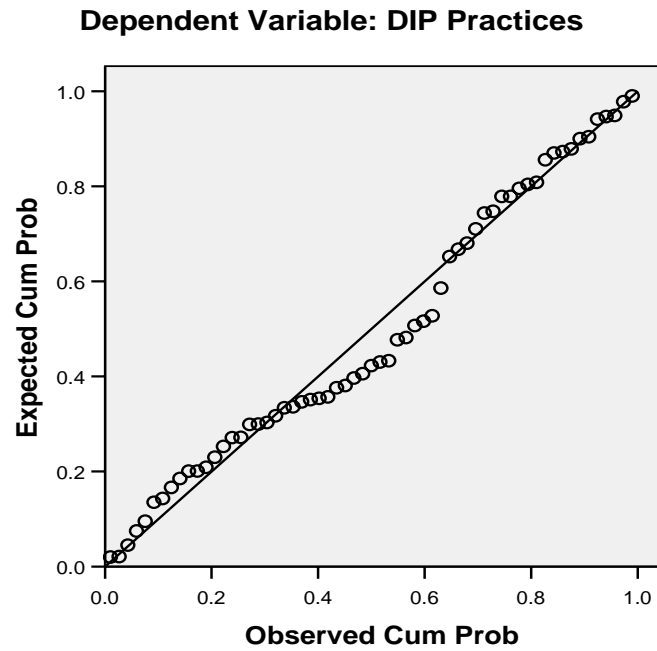


Scatterplot

Dependent Variable: DIP Practices

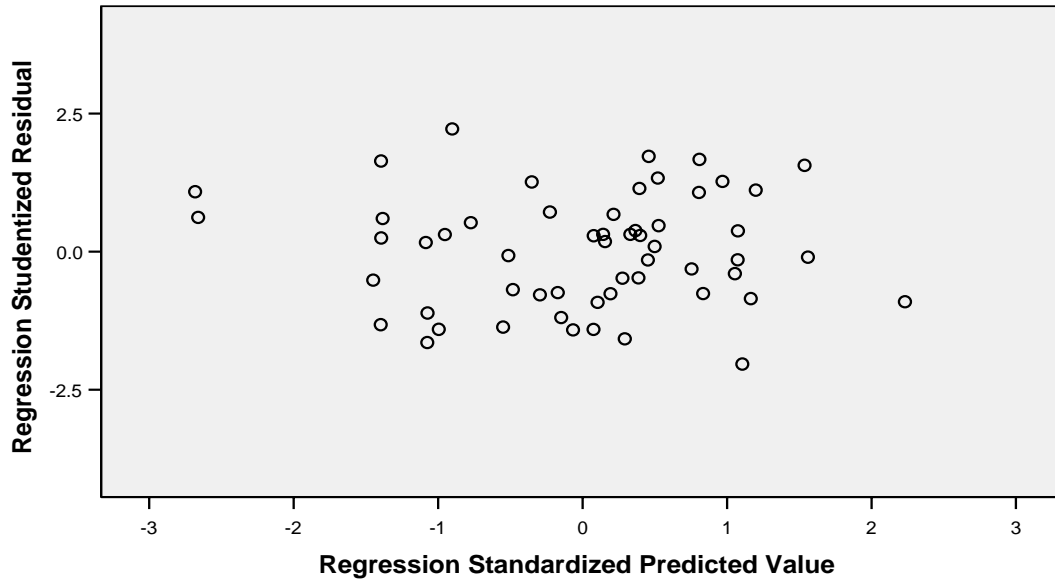


Normal P-P Plot of Regression Standardized Residual



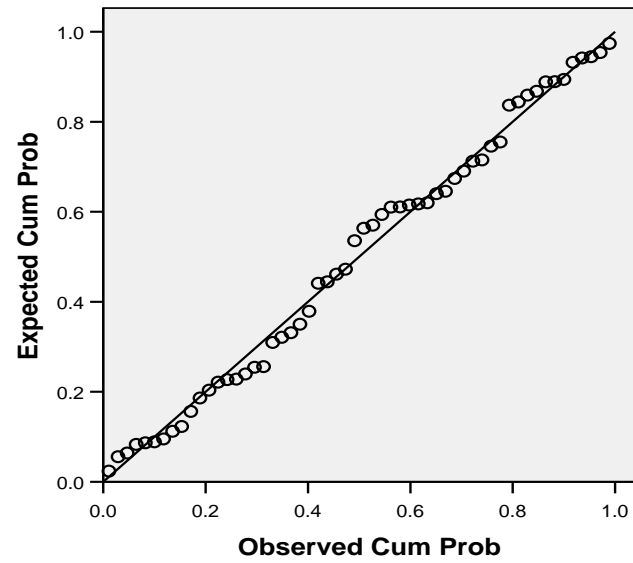
Scatterplot

Dependent Variable: Total Learner-Centered Score



Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Learner-centered total Score



APPENDIX B

PERMISSIONS TO USE THE QUESTIONNAIRES

On the Learner-Centered Teaching Survey

Date:

Sun, 3 Dec 2006 08:15:20 -0700

From:

"Barbara L. McCombs

To:

"Vasinee Israsena"

Dear Vasinee,

Thanks for sending the documents. I am just leaving for a trip and won't be back in the office until December 8. As I understood our prior communications, you would be using the K-3 ALCP surveys with both teachers and students. It sounds like you just want to use the teacher beliefs portion with teachers and administrators. That is a bit of a problem in that we need student data as well in order to use it in our validation database. I am happy to include the surveys but would appreciate a clarification. Thanks so much!

Best, Barbara

Barbara L. McCombs, Ph.D.

Senior Research Scientist and Director

Human Motivation, Learning, and Development Center

University of Denver Research Institute

-----Original Message-----

From: Vasinee Israsena

Sent: Sunday, December 03, 2006 07:42 AM

To: Barbara L. McCombs

Subject: Statement

Dear Professor McCombs,

I attach a letter to state that I will share the data with you and my IRB application form to you. I hope that you will satisfy and let me use your assessment. I hope that I will be able to get the assessment as soon as possible. I will go back to Thailand on the 5th of December to collect the data. I need to translate the assessment to Thai language as soon as possible.

Thank you for your kindness.

Sincerely yours,

Vasinee Israsena

On the Teacher Beliefs and Practice survey

Subject:

RE: permission for using your survey questionnaire

Date:

Thu, 26 Oct 2006 08:04:36 -0500

From:

"Burts, Diane"

To:

"Vasinee Israsena"

Hi Vasinee-

You have permission to use the Teacher Beliefs and Practices survey. We are interested in the results of your study, so when it is complete, please send an abstract or how to access your work to Dr. Terry Buchanan. Best wishes on your research project.

Diane Burts

-----Original Message-----

From: Vasinee Israsena

Sent: Wednesday, October 25, 2006 9:09 PM

To: "Burts, Diane"

Subject: A permission for using your survey questionnaire

Dear Professor Burts,

My name is Vasinee Israsena from Thailand. I have been working at a Demonstration School of Srinakarinwirot University, Bangkok, Thailand for 10 years. Then I left the school to continue study for my doctoral degree at University of North Texas. I will conduct my research on "Teachers and Administrators' Beliefs about Learner-Centered Education: Implication For *Success For Life Thailand*. I found a dissertation by Kim, and I am interested in using the survey questionnaire of Teacher Beliefs and Practices Survey: Operationalizing the 1999 NAEYC Guidelines. I asked a suggestion from my advisor, Professor George. S. Morrison, and he agreed with me to ask your permission for using this survey questionnaire. I also plan to conduct a research for Office of National Council, Thailand on "Quality of Kindergarten in Thailand" because I am still official under the Thai government.

I would like to ask a permission to use your questionnaire for both my dissertation and my research project. I will use some parts of your survey questionnaire for my dissertation, and I will use almost of questionnaire for my research project. I believe that your survey questionnaire will be useful for my dissertation and my country. I will appreciate if you let my use your survey questionnaire. Thank you very much for your kindness. I am looking forward to hear from you. If you have further questions, please email me.

Vasinee Israsena

With this mail, I also attach my IRB for you.

APPENDIX C

AN EXAMPLE OF THE SFLT TRAINING SCHEDULE

The Training Schedule of the SFLT Workshop in 2006

Session 1: Overview to Success For Life Thailand

Session 2: Learner-Centered Education and Developmentally Appropriate Practices

Session 3: Brain Education

Session 4: The Project Approach

Session 5: The Enriched Environment

Session 6: Learning Centers

Session 7: The King's Way

Session 8: The Assessment in the Success For Life Thailand Classroom

Session 9: Family Involvement and Support

Session 10: Developing, making and using materials to support Success For Life

Thailand Classroom Learning

Session 11: Success For Life Thailand Teachers Shares

Session 12: The Culminating Experience and Awarding of SFLT certificates

REFERENCES

- American Psychological Association Presidential Task Force on Psychology in Education. (1993). *Learner-centered psychological principles: Guidelines for school redesign and reform*. Washington, DC and Aurora, CO: American Psychological Association and Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED371994)
- Benson, M., & Alat, K. (2002). Education matters in the nurturing of the beliefs of preschool caregivers and teachers. *Early Childhood Research and Practice*, 4(2). Retrieved October 9, 2006, from <http://ecrp.uiuc.edu/v4n2/mcmullen.html>
- Bredenkamp, S., & Copple, C. (1997) (Eds.). *Developmentally appropriate practice in early childhood programs*. Revised Edition. Washington, DC: National Association for the Education of Young Children.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiment by nature and design*. MA: Harvard University Press.
- Burts, D. C., Buchanan, T. K., Charlesworth, R., & Jambunathan, S. (2000). *Rating scale for measuring the degree of developmentally appropriate practice in early childhood classrooms (3-5 year olds)*. Baton Rouge, LA: Louisiana State University College of Education.
- Butkatunyoo, O. (1999). *A study of administrators and teachers: understanding of developmentally appropriate practice for preschool children*. Dissertation of Chulalongkorn University. (ISBN974-333-439-4)
- Castro, R. R. (1998). From theory to practice: A first look at Success For Life-A brain research-based early childhood program. *Dissertation Abstracts International*, 59(11), 4049A. (UMI No. 9914264)
- Chaipatana Foundation. (1996). *Self-sufficient economy*. Retrieved November 13, 2006, from www.chaipat.or.th/chaipat/journal/aug99/eng/self.html
- Chengkoon, W. (2001). *How does education reform? What for and for who?* Thailand: Pappip.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- The Columbia Electronic Encyclopedia. (2005). *Belief*. Retrieved November 14, 2006, from <http://columbia.thefreedictionary.com/beliefs>
- Copple, C., & Bredenkamp, S. (2006). *Basics of developmentally appropriate practice*. Washington, DC: National Association for the Education of Young Children.

- Daley, B. J. (2003). A case of learner-centered teaching and learning. *New Directions for Adult and Continuing Education*, 98(2), 23-30.
- Daniels, D. D., & Perry, K. E. (2003). "Learned-centered" according to children. *Theory into Practice*, 42, 102-108.
- DeVellis, R. F. (1991). *Scale development: Theory and applications*. Newbury Park, CA: Sage.
- Educational Reform Bureau. (2002). *The Education Act of Thailand 1999*. Thailand: Ministry of Prime Minister Press.
- Fasko, D, Jr., & Grubb, D. J. (1997). *Implications of the learner-centered psychological principles and self-assessment tools for teacher education reform* (Report No. M027257). IL: The Annual meetings of the American Educational Research Association. (ERIC Document Reproduction Service No. ED411276)
- Glass, G. V., Peckham, P. D., & Sanders, J. R. (1972). Consequences of failure to meet assumptions underlying the analyses of variance and covariance. *Review of Educational Research*, 42, 237-288.
- Gmitrova, V., & Gmitrov, J. (2003). The impact of teacher-direct and child-directed pretend play on cognitive competence in kindergarten children. *Early Childhood Education Journal*, 30, 241-246.
- Gordon, A. W., & Browne, K.W. (2004). *Beginning and Beyond* (6th ed.). New York: Thomson & Delmar Learning.
- Hair, J. F. Jr., Black, W. C., Babib, B. J., Anderson, & R. E., Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson.
- Hanniger, M. L. (2002). *Teaching young children* (2nd ed.). New Jersey: Merrill Prentice.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied statistics for the behavioral sciences* (5th ed.). Boston: Houghton Mifflin Company.
- Huffman, R. L., & Speer, W. P. (2000). Academic performance among at-risk children: The role of the developmentally appropriate practices. *Early Childhood Research Quarterly*, 15, 167-183.
- Jambunathan, S., Bursts, C. D., & Pierce, H. S. (1999). Developmentally appropriate practices as predictors of self-competence among preschoolers. *Journal of Research in Childhood Education*, 13, 167-174.
- Jones, I, & Gullo, D.F. (1999). Differential social and academic effects of developmentally appropriate practices and beliefs. *Journal of Research in Childhood Education*, 14, 26-35.

- Kaewdang, R. (2006). *Learning for the new century*. Retrieved May 1, 2006, from www.edthai.com/reform/dec16a.htm
- Karmerman, S. B. (2002). *Early childhood care and education and other family policies and programs in South-East Asia: UNESCO Early childhood and family policy Series No 4*. Retrieved May 1, 2004, from <http://unesdoc.unesco.org/images/0012/001279/127984e.pdf>
- Kent, A. M. (2004). Improving teacher quality through professional development. *Education*, 124, 427-432.
- Kim, J., Kim, S., & Maslak, M. A. (2005). Toward an integrative "Educare" system: An investigation of teachers' understanding and uses of developmentally appropriate practices and for young children in Korea. *Journal of Research in Childhood Education*, 20, 49-56.
- Kim, K. R. (2006). Teacher beliefs and practices survey: Operationalizing the 1997 NAEYC Guidelines. *Dissertation Abstracts International*, 66(07), 2486A. (UMI No. 3184073)
- Lascarides, V. C., & Hinitz, B. F. (2000). *History of early childhood education*. New York: Falmer Press.
- Maxwell, L. K., McWilliam, A. R., Hemmeter, L. M., Ault, J. M., & Scuster, W. J. (2001). Predictors of developmentally appropriate classroom practices in kindergarten through third grade. *Early Childhood Research Quarterly*, 16, 431-452.
- Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analyzing data* (2nd ed.). Mahwah, NJ: Erlbaum.
- McCombs, B. L. (2000a). *Assessing the role of educational technology in the teaching and learning process*. Retrieved October 31, 2006, from www.ed.gov/rschstat/eval/tech/techconf00/mccombs_paper.html
- McCombs, B. L. (2000b, August). *Addressing the personal domain: The need for a learner-centered framework*. Paper presented in the symposium, Learner-Centered Principles in Practice: Addressing the Personal Domain, at the annual meeting of the American Psychological Association, Washington, D.C.
- McCombs, B. L. (2001). What do we know about learners and learning? The learner-centered framework: Brining the educational system into balance. *Educational Horizon*, 79, 182-193.
- McCombs, B. L. (2003a). *Defining tools for teacher reflection: The assessment of learner-centered practices (ALCP)* (Report No. SP041658). Chicago, IL: Annual Meeting of the American Educational Research Association. (ERIC Document Reproduction Service No. ED478622)

- McCombs, B. L. (2003b). A framework for the redesigning of K-12 education in the context of current educational reform. *Theory into Practice*, 42, 93-101.
- McCombs, B. L. (2004). *Grades K-3 student and teacher assessment of learner-centered practices (ALCP) survey descriptions*. Denver, CO: Human Motivation, Learning, and Development Center.
- McCombs, B. L., Lauer, P.A., & Paralez, A. (1997). *Researcher test manual for the Learner-Centered Battery (Grades 6-12 version): A set of self-assessment and reflection tools for middle and high school teachers* (Report No. TM028939). Aurora, CO: Mid-Continent Regional Educational Research and Improvement. (ERIC Document Reproduction Service No. ED423377)
- McMullen, B. M. (1999). Characteristics of teachers who talk the DAP talk and walk the DAP walk. *Journal of Research in Childhood Education*, 13, 216-230.
- McMullen, M., Elicker, J., Wang, J., Erdiller, Z., Lee, S., Lin, C., & Sun, P. (2005). Comparing beliefs about appropriate practice among early childhood education and care professionals from the U.S., China, Taiwan, Korea, and Turkey. *Early Childhood Research Quarterly*, 20, 451-464.
- Miller, P. H. (2002). *Theories of developmental psychology* (4th ed.). New York: Worth Publishers.
- Ministry of Education Government of Thailand. (1998). *History of Thai Education*. Retrieved October 28, 2006, From www.moe.go.th/main2/article/e-hist01.htm
- Minister of Education Government of Thailand. (1999). *National education act*. Retrieved May 11, 2005, from www.moe.go.th/English/edu-act.htm
- Ministry of Education Government of Thailand. (2001). *Administrators and child centered*. Retrieved October 11, 2006, from www.moe.go.th/cgi-script/csArticles/articles/000001/000149.htm
- Ministry of Foreign Affairs, Thailand. (2005). Thailand's education policies. Retrieved May 1, 2004, from <http://www.mfa.go.th/web/17.php>
- Ministry of Foreign Affairs, Thailand. (2006). *Ministry of Foreign Affairs, Kingdom of Thailand*. Retrieved May 1, 2004, from www.mfa.go.th/web/14.php
- Montessori, M. (1972). *The secret of childhood* (S. J. Costelloe, Trans.). New York: Ballantine Books. (Original work published 1960)
- Morrison, G. S. (1999). *A document of Success For Life Thailand*. (copy).
- Morrison, G. S. (2004). *Early childhood education today* (9th ed.). Ohio: Pearson Prentice Hall.
- Morrison, G. S. (2005). *A document of Success For Life Thailand*. (copy).

- Morrison, G. S. (2006). *Success For Life Training*. Training presented at Petchaburi Rajabhat, Petchaburi, Thailand. (copy).
- Moonsilp, V. (1998). *Education revolution between King Rama V to King Rama VI*. Thailand: 2020World Media.
- National Association for the Education of Young Children. (1998). *Guidelines for developmentally appropriate practices*. Retrieved April 29, 2005, from www.naeyc.org/resources/eyly/1998/05.htm
- Nelson, F. R. (2000). Personal and environmental factors that influence early childhood teachers' practices. *Journal of Instructional Psychology*, 27(2), 1-10.
- Office of the National Education Commission of Thailand. (1999a). *Early childhood learning*. Retrieved on May 1, 2004, from www.onec.go.th/publication/4206001/early_a2.pdf
- Office of the National Education Commission of Thailand. (1999b). *Education for the new century*. Retrieved October 10, 2006, from www.edthai.com/reform/jan21a.htm
- Office of the National Education Commission of Thailand. (1999c). *Hope for better Thailand*. Retrieved May 4, 2006, from www.edthai.com/reform/nov28a.htm
- Office of the National Education Commission of Thailand. (1999d). *Learning reform: A must for a nation*. Retrieved October 4, 2006, from www.edthai.com/reform/dec03a.htm
- Office of the National Education Commission of Thailand. (1999e). *National Education Act of B.E. 2542 (1999)*. Retrieved May 4, 2006, from www.edthai.com/act/index.htm
- Office of the National Education Commission of Thailand. (2000a). *Ideas and experiences for teaching with child centered in the United States*. Thailand: Office of the National Education Commission of Thailand.
- Office of the National Education Commission of Thailand. (2000b). *Learning for Thai children: Reggio Emilia*. Retrieved May 1, 2004, from www.onec.go.th/publication/4206003/reggio_approach.html
- Office of the National Education Commission of Thailand. (2000c). *Learning is fundamental for humans of all ages*, Retrieved October 20, 2006, from www.edthai.com/reform/mar20b.htm
- Office of the National Education Commission of Thailand. (2000d). *Power of the first five years: Early Childhood Education*. Retrieved May 1, 2004, from www.edthai.com/reform/mar22c.htm
- Office of the National Education Commission of Thailand. (2000e). *Teacher-enlightenment*. Retrieved May 1, 2004, from www.edthai.com/reform/jun12e.htm

- Office of the National Education Commission of Thailand. (2001). *Plan and policies of early childhood education in Thailand*. Bangkok: Pickwann.
- Office of the National Education Commission of Thailand. (2003). *The evaluative reports of the education reform B.C. 2545*. Bangkok: Kurusapa.
- Office of the National Education Commission of Thailand. (2004). *Education in Thailand*. Retrieved May 1, 2004, from www.edthai.com/publication/edu2004/ed_in_thai.html
- Office of the National Education Commission of Thailand. (2005a). *The National Standards*. Bangkok: Sahaiblock and Printing.
- Office of the National Education Commission of Thailand. (2005b). *Policy and educational plan for early childhood (0-5 years old) 2002-2006*. Retrieved May 1, 2004, from www.onec.go.th/publication/4506001/index_05.htm
- Phanosot, P. (2000). *Waldorf approach*. Retrieved May 1, 2004, from www.onec.go.th/publication/4306005/index_w.htm
- Pitiyanuwat, S., & Sujiva, S. (2005). *Civic education in Thailand: Policies and practices in schools*. Thailand: Chulalongkorn University Press.
- Rushton, S., & Larkin, E. (2001). Shaping the learning environment: Connecting developmentally appropriate practices to brain research. *Early Childhood Education Journal*, 29, 25-33.
- Samahito, C. (2003). "Success for Life" in Thailand: Educational and cultural implementation. *Dissertation Abstracts International*, 63(09), 3105A. (UMI No. 3065599)
- Schuh, K. L. (2003). Knowledge construction in the learner-centered classroom. *Journal of Educational Psychology*, 95, 426-442.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Erlbaum.
- Songsaree, P. (2001). *Crises of child-centered and solution*. Thailand: Skybook Company Limited.
- South East Asia Education Minister of Education Organization Regional Center of Educational Innovation and Technology. (2005). *The National Education Scheme*. Retrieved on October 2, 2005, from www.seameoinnotech.org/resources/rein/rpol/413.asp
- Stone, A. A., & Litcher-Kelly, L. (2006). Momentary capture of real-world data. In M. Eid & E. Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 61-72). Washington, DC: American Psychological Association.
- Thai-Israel Foundation. (2000). *Learning for Thai children: Whole language approach*. Retrieved May 1, 2004, from www.onec.go.th/publication/4306006/index_p.htm

- Thailand Department of Education. (2003). *Handbook of early childhood curriculum B.E 2546 (For children ages 3-5)*. Bangkok: Kurusapaladpreaw Publishing.
- Tourism Thailand Organization. (2006). *About Thailand*. Retrieved October 26, 2006, from www.tourismthailand.org/search/default.aspx?type=about/aboutthailand.aspx&keyword=population
- Tungjitsomkit, W. (2001). *Education and Being Thai teachers*. Bangkok: O.S. Printing House.
- UNESCO Bangkok. (2005). *UNESCO Bangkok, Thailand*. Retrieved June 11, 2005, from www.unescobkk.org/index.php?id=188
- Van Horn, M. L., & Ramey, S. L. (2004). A new measure for assessing developmentally appropriate practices in early elementary school: A developmentally appropriate practice template. *Early Childhood Research Quarterly*, 19, 569-587.
- Vasinsarakorn, V. (2003). *Thailand Education*. Thailand: Sathabanpatanakoonapapwichakarn.
- Walsh, D. J. (1989). Changes in kindergarten: Why here? Why now? *Early Childhood Research Quarterly*, 4, 377-391.
- Wortham, S. C. (2002). *Early childhood curriculum* (3rd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.